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A41 R317P progress report on

Cooperative

State-Federal

Brucellosis



B

Eradication

FEB 1 5 1360

Program

calendar year 1957

ANIMAL DISEASE ERADICATION DIVISION

AGRICULTURAL RESEARCH SERVICE

U. S. DEPARTMENT OF AGRICULTURE

C4-1-1



PROGRESS REPORT

on 965621.

COOPERATIVE STATE-FEDERAL BRUCELLOSIS ERADICATION PROGRAM

PRESENTED AT THE NATIONAL BRUCELLOSIS COMMITTEE

ANNUAL MEETING

OMAHA, NEBRASKA, FEBRUARY 19, 1958

INTRODUCTION

In order that the material available to the National Brucellosis Committee be as recent as possible, some of the data will be presented on a calendar year basis in the same manner as it was handled at the 1957 meeting. Graphic material, together with National and State charts have been prepared to depict the current position and changing trends.

Since our report to this Committee last year, the cooperative State-Federal brucellosis eradication campaign has continued to make good progress. The results of over three years' work on the accelerated program are most encouraging and demonstrate the benefits that can be derived from such an all-out effort. The strong support being given the program by the livestock industry and other interested groups underlines a widespread determination to finish once and for all the fight against brucellosis. By maintaining the momentum generated over the past few years, there is every reason to believe that the entire country can be declared Modified-Certified Brucellosis-Free within a relatively short period of time. The 1960 goal, which was considered highly visionary when first proposed, is becoming more realistic all the time.

By C. K. MINGLE, D.V.M., CHIEF BRUCELLOSIS ERADICATION SECTION

Program Activities

During the past calendar year, a total of 1.23 million herds and 16.65 million cattle were blood tested throughout the country. This represents increases over the previous year of 9.2 percent in the number of herds tested and 6.0 percent in the number of cattle tested.

During the same period, there were 1.81 million ring tests reported. This is about the same number of such tests conducted last year. The wide acceptance being given the ring test continues to be fully justified by satisfactory results. The value of this procedure in making it possible to locate centers of infection before they contribute to serious spread of the disease is extremely high.

Official vaccinations increased to nearly 6 million last year, or approximately one million more than reported for calendar year 1956. The need for continued vaccination in most areas remains high and should be encouraged and supported as widely as possible. This is especially true in certified areas where the danger of reinfecting susceptible cattle populations is still a serious threat.

Infection Rates

Both herd and cattle infection rates have declined during the past 12 months from what they were on December 31, 1956. Based upon blood test results alone, herd infection dropped from 12.0 percent in 1956 to 9.8 percent in 1957 and cattle infection was reduced from 1.9 percent to 1.6 percent during the same period.

A similar trend was observed in the number of ring suspicious herds disclosed during the year. For 1957, 9.8 percent of the ring tested herds were classed as suspicious. This compares with 12.6 percent similarly identified in 1956. The fact that there has been a consistent reduction in the number of ring-suspicious herds over the past three years further indicates the value of brucellosis ring testing.

Certification of Areas

The certification of areas continues to be the basic structure of our program and every effort must be made to promote work along these lines as rapidly as possible. It is likewise important that approved standards for the establishment and maintenance of certified areas be rigidly followed in order that maximum confidence in this designation can be assured. In line with this policy, it was necessary to remove eight counties from the certified list last year because of failure to properly requalify within specified time limits.

During the twelve-month period ending December 31, 1957, 337 initial county certifications were recorded. This compares with 197 for the preceding year. New county certifications are being approved at the rate of nearly 30 per month. At the end of calendar year 1957, there were 914 certified counties and 690 other counties doing complete area work leading directly to certification. Thus out of 3150 counties in the United States, Puerto Rico and Virgin Islands, 51 percent are either certified or nearing that goal.

Since our last meeting three new States and Puerto Rico have been added to the roster of Certified States, making a total of nine States and Puerto Rico which are now completely qualified in this regard. It is anticipated that this number will be nearly doubled within the next six months.

Cull and Dry Cow Testing

As indicated in our previous report, the Animal Disease Eradication Division has continued investigations designed to evaluate cull and dry cow testing. The data so far assembled have been critically reviewed and shown to be statistically sound from the standpoint of maintaining certification of areas. Consequently, as of January 3, 1958, the Agriculture Research Service approved use of this procedure as an alternate method for recertifying range and semi-range areas, conditioned on the development of effective means for tracing back to areas and ranches of origin the cull and dry cows tested at concentration points. As most of you know, the United States Livestock Sanitary Association recommended the adoption of such an amendment to the Uniform Methods and Rules in 1956. Continued studies are being made to determine the suitability of the same general procedure for initial certification or range and semi-range areas.

Personnel Problems

Inability to fully meet service requirements of the program continues to be the most important limiting factor in the brucellosis eradication campaign. In response to a recent questionnaire, 15 States reported their programs were being seriously retarded by failure of fee-basis veterinarians to participate to the extent necessary to meet program needs. On this same survey, 25 States indicated that a shortage of veterinarians was restricting the program.

Even though more than 6000 practicing veterinarians are listed for fee-basis work, not over 50 to 60 percent are participating at any one time. This largely explains the failure to meet service requirements in some areas even though the number of practitioners is adequate.

Qualified technicians are being employed under veterinary supervision in eleven States and Puerto Rico and there is every indication that this type of service is satisfactory. When veterinarians are not available or willing to actively assist, it would appear that the only solution to this problem is supervised use of technicians. The program should not be allowed to fail on this point alone.

Eradication Goal

As progress continues toward early certification of the entire country, it becomes increasingly important that emphasis be placed on the need for continuing the program at its present level until final eradication is achieved. Current results of the accelerated campaign confirm the widely held view that eradication is possible with the intelligent use of available procedures. Modified Certified Brucellosis-Free Areas are especially vulnerable to reinfection at this stage and must remain alert and vigilant if this status is maintained and further progress made toward final eradication. Continued vaccination will be extremely helpful in this regard.

TABULATED NATIONWIDE REPORT ON BRUCELLOSIS ERADICATION ACTIVITIES

Percent	Change	+9,2	-11.2	(-2.2)	0.9+	-12,3	(-0.3)	-1.8	(+10,7)		-1.3	-23,1	(-2,8)	+19.6		+71.0		+56.2	
. Years	1957	1,232,535	121,161	9,8	16,654,867	271,167	1.6	269,081	99.2		1,817,536	179,611	8.6	5,983,838		337	8	914	
Calendar	1956	1,128,315	136,298	12.0	15,698,423	309,179	1.9	273,800	88.5		1,841,219	233,290	12.6	4,999,330		197	46	585	
Activities		Blood Tests Herds Tested	Reactor Herds	Percent	Cattle Tested	Reactor Cattle	Percent	Reactors Slaughtered	Percent	Ring Tests	Herds Tested	Susp. Herds	Percent	Vaccinations	Certifications	New Counties	Counties Removed	Total Cert, Counties	

() % difference

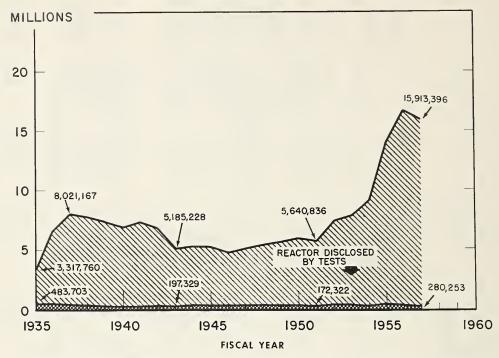
NATIONAL STATUS COMPARATIVE BRUCELLOSIS DATA

	CA	CALENDAR YEARS	S		CA	CALENDAR YEARS			PERCENT
ACTIVITIES	1952	1953	1954	TOTAL	1955	1956	1957	TOTAL	CHANGE
BLOOD TESTS									
HERDS TESTED	685,247	641,477	755,963	2,082,687	1,171,619	1,128,315	1,232,535	3,532,469	1 9.69
REACTOR HERDS	115,270	107,193	101,985	324,453	169,516	136,298	121,161	426,975	31.5 /
PERCENT	16.8	16.7	13.4	15.5	14.4	12.1	8.6	12.1	(3.4-)
CATTLE TESTED	7,918,526	8, 108, 533	10,193,460	26,225,569	17,128,877	15,698,423	16,654,867 49,482,157	49,482,157	88.6 /
REACTOR CATTLE	302,631	268,544	249,667	820,842	429,228	309,179	271,167	1,009,574	22.9 /
PERCENT	3.8	3.3	2.4	3.1	2.5	1.9	1.6	2.0	(1.1-)
REACTORS SLAUGHTERED	95,104	100,605	143,685	339,394	362,999	273,800	259,081	905,880	166.9 /
PERCENT	31.4	37.4	57.5	41.3	84.5	38.6	99.2	39.7	(48.47)
RING TESTS									
HERDS TESTED	530,100	790,789	1,039,147	2,360,036	1,495,939	1,841,219	1,817,536	5, 154,694	118.4 /
SUSPICIOUS HERDS	145,255	213,496	254,143	617,894	286,944	233, 290	179,611	699,845	13.2 /
PERCENT	27.4	27.6	24.4	26.1	19.1	12.6	9.8	13.5	(12.6-)
VACCINATIONS	3,407,092	3,768,777	4,061,348	11,237,217	4,507,973	4,999,330	5,983,838	5,983,838 15,591,141	38.7 4
CERTIFICATIONS									
NEW COUNTIES	22	43	40	105	18	197	337	621	491.4 /
COUNTIES REMOVED	108	24	-	133	က	46	80	57	
TOTAL CERT. COUNTIES	292	311	350	350	434	585	914	914	161.1 /

()PERCENT DIFFERENCE

BOVINE BRUCELLOSIS U.S.A.

Official Blood Serum Agglutination Tests

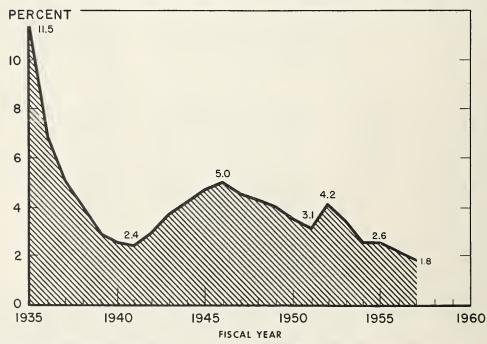


U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (1) -5017 AGRICULTURAL RESEARCH SERVICE

BOVINE BRUCELLOSIS U.S.A.

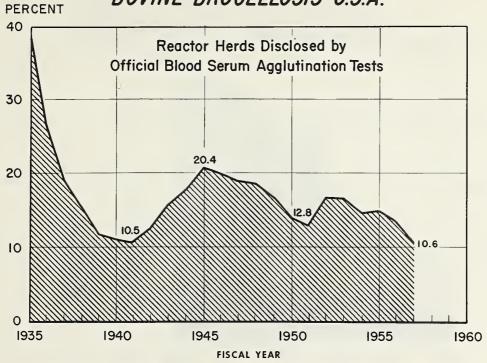
Reactors to Official Blood Serum Agglutination Tests



U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (1) -5019 AGRICULTURAL RESEARCH SERVICE



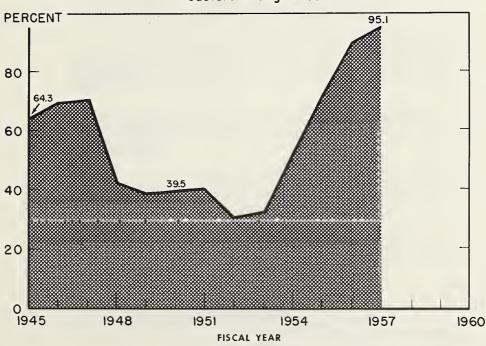


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NEG. 58 (1) -5018 AGRICULTURAL RESEARCH SERVICE

BOVINE BRUCELLOSIS U.S.A.

Reactors Slaughtered

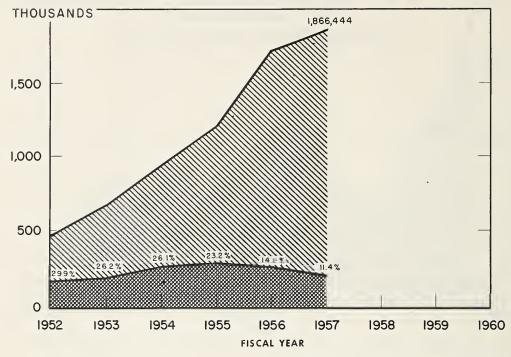


U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (1) -5020 AGRICULTURAL RESEARCH SERVICE

BOVINE BRUCELLOSIS U.S.A.

RING TEST... Herds Tested, Herds Infected

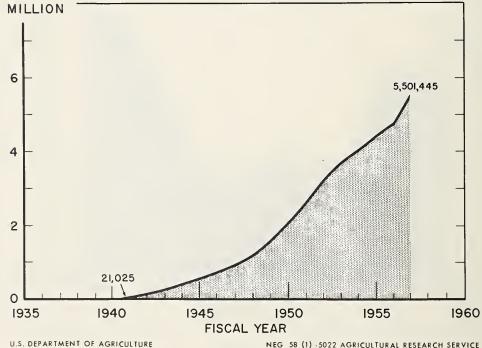


U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (1) -5021 AGRICULTURAL RESEARCH SERVICE

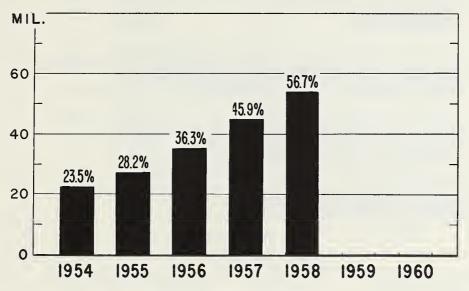
BOVINE BRUCELLOSIS U.S.A.

Official Calf Vaccination



NEG 58 (1) -5022 AGRICULTURAL RESEARCH SERVICE

CATTLE UNDER SUPERVISION



Data As of January I Yearly
% Based on Number of Cattle and Calves on Farms

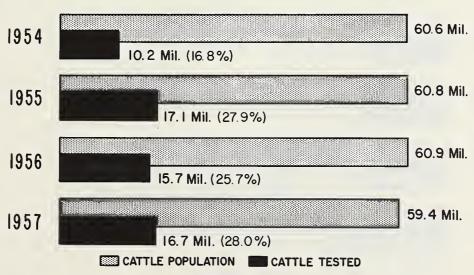
U,S. Department of Agriculture

NEG. 58(I) 5025

Agricultural Research Service

Bovine Brucellosis

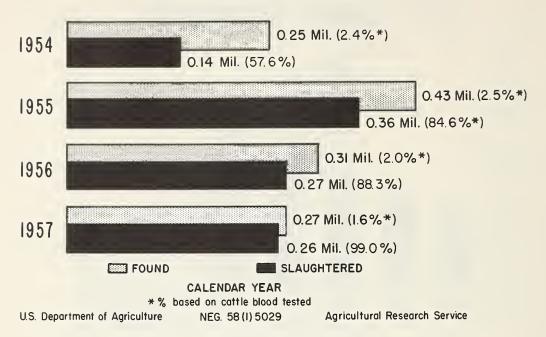
CATTLE BLOOD TESTED



CALENDAR YEAR

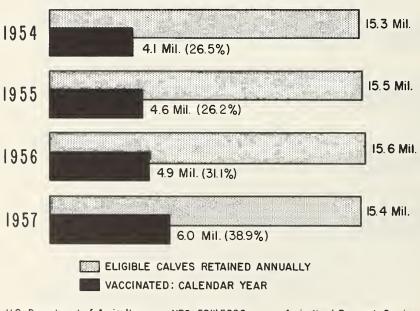
% based on all cows 2 yr. and older, heifers 1-2 yr.
U.S. Department of Agriculture NEG. 58 (1) 5028 Agricultural Research Service

BRUCELLOSIS REACTORS



Bovine Brucellosis

CALVES VACCINATED

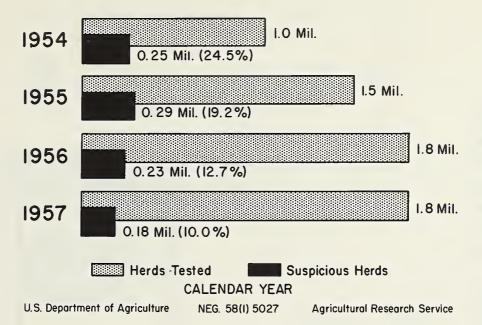


U.S. Department of Agriculture

NEG 58(I) 5026

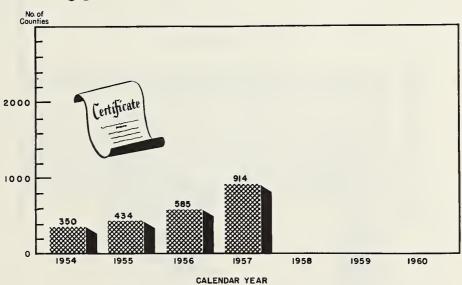
Agricultural Research Service

BRUCELLOSIS RING TESTS



BRUCELLOSIS

COUNTY CERTIFICATION STATUS



U. S DEPARTMENT OF AGRICULTURE

Neg. 58 (I) 5031

AGRICULTURAL RESEARCH SERVICE

BOVINE BRUCELLOSIS LOSSES

\$91,900,000

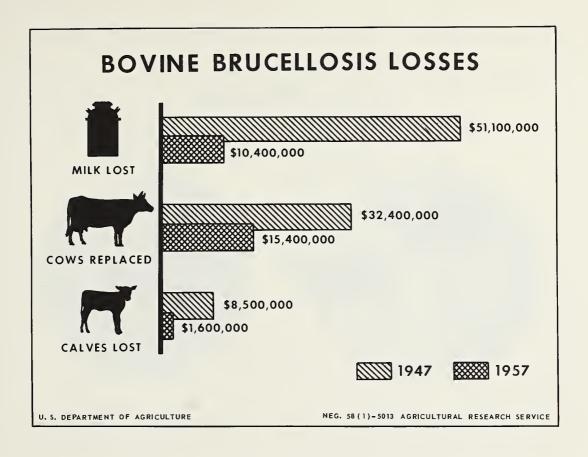
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\$27,400,000

管

1957

1947

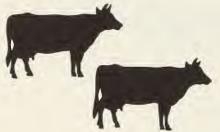




Bovine Brucellosis

COWS REPLACED

522 Thousand (\$32,400,000)



283 Thousand (\$15,400,000)



1947

1957

U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (1) - 5014 AGRICULTURAL RESEARCH SERVICE

Bovine Brucellosis

CALVES LOST

318 Thousand (\$8,500,000)



68 Thousand (\$1,600,000)

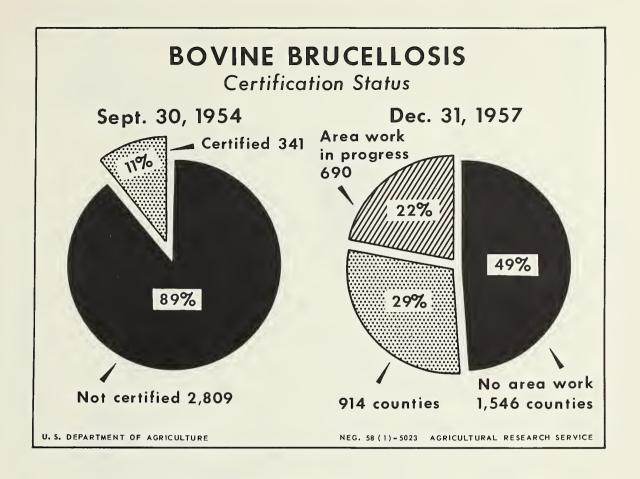


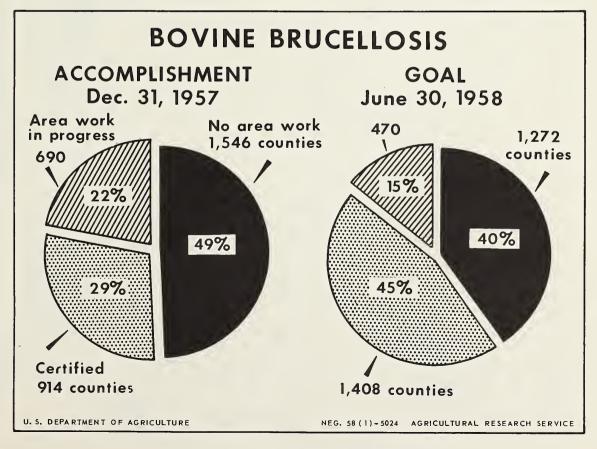
1947

1957

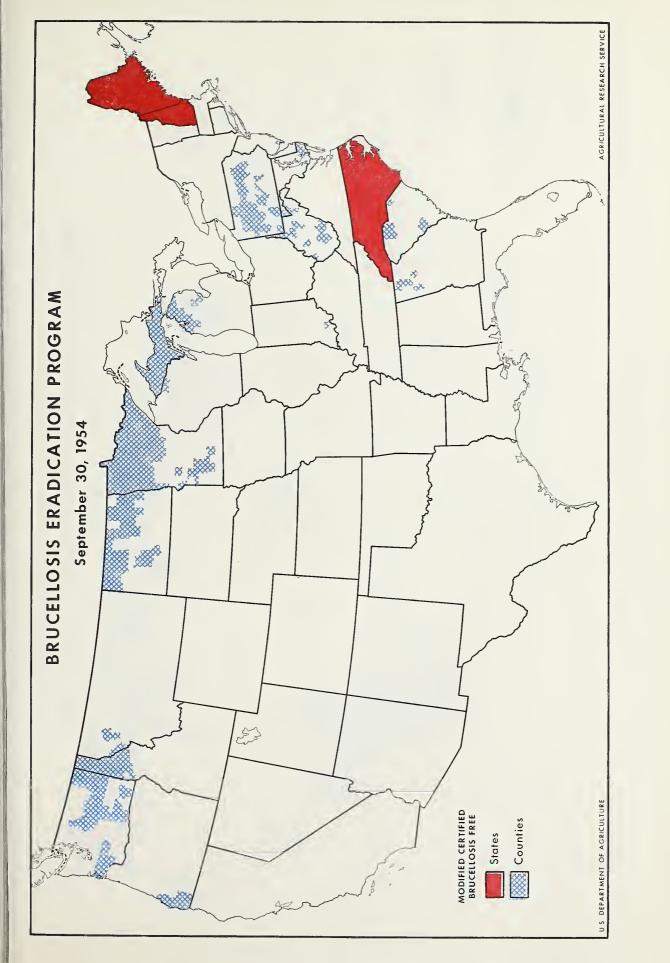
U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (1)-5015 AGRICULTURAL RESEARCH SERVICE

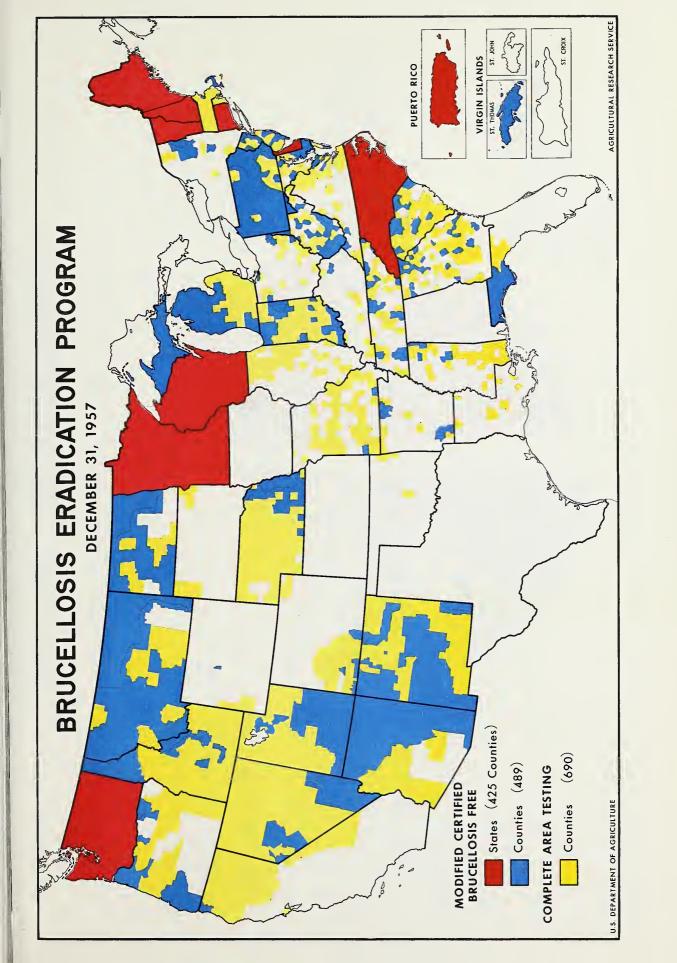








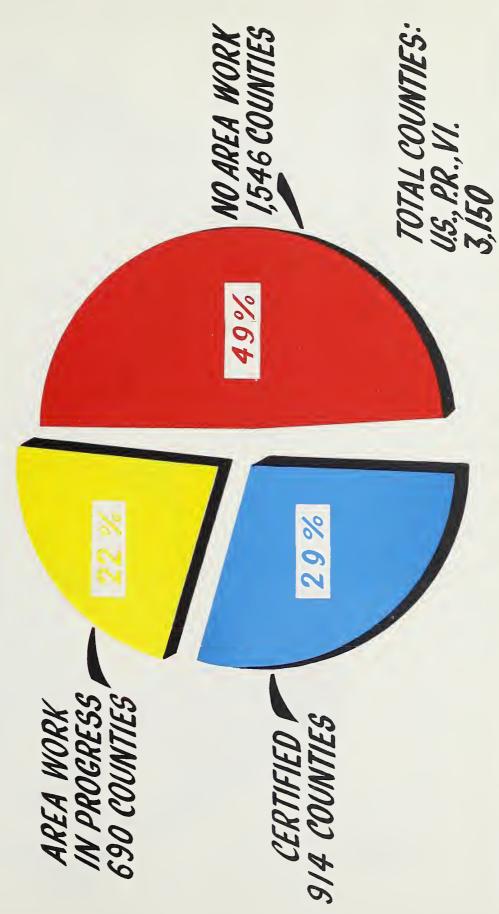




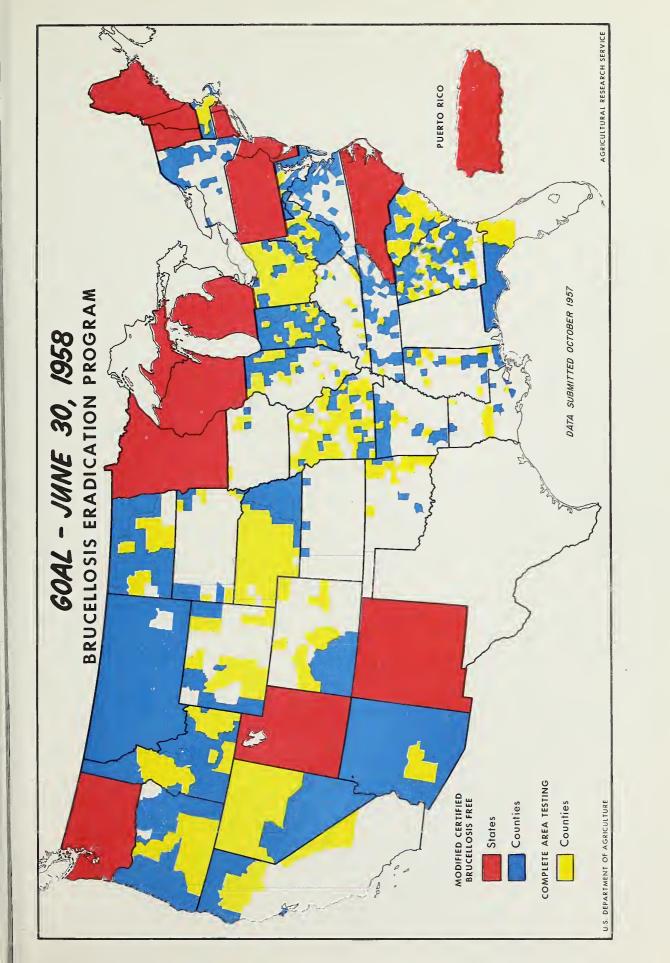


BOVINE BRUCELLOSIS

Certification Status Dec. 31, 1957









INDIVIDUAL STATE REPORTS

ON

BRUCELLOSIS ERADICATION ACTIVITIES

PART II

Note

In some cases, more reactor cattle were reported slaughtered than were found. This occurs at times when reactors disclosed at the end of the preceding year are carried over and slaughtered at the beginning of the next year.



Activities	Calend	lar Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	23,431	31,495	+34.4
No. Reactor Herds	2,510	2,803	+11.7
Percent	10.7	8.9	(-1.8)
No. Cattle Tested	293,542	372,304	+26.8
No. Reactor Cattle	7,655	7,061	-7.8
Percent	2.6	1.9	(-0.7)
Reactors Slaughtered	5,799	6,242	+7.6
Percent	75.8	88.4	(+12.6)
Ring Tests			
No. Herds Tested	10,438	14,984	+43.5
No. Susp. Herds	2,870	2,545	-11.4
Percent	27.4	16.9	(-10.5)
Vaccinations	59,851	66,337	+10.8
Certifications			
New Counties	0	0	
Counties Removed	0	0	
Total Cert. Counties	0	0	

() % difference

Through efforts of the State brucellosis committee a program for complete area testing was adopted in Alabama which became effective January 30, 1958. The principal deficiency in the brucellosis project during the past calendar year was lack of a program for area certification. The work will still be retarded to some extent by the requirement that 85 percent of the owners representing 85 percent of the cattle, must petition before a county can be declared for area testing.

Anticipated goals for 1958 are (1) the initial certification of six counties and (2) complete area testing under way in ten additional counties. There are no certified counties in Alabama at this time.

There are provisions for the certification of purebred brucellosis-free swine herds. This program is well accepted by the industry and is expanding with 15 herds initially certified during the year. This makes a total of 101 such herds in the State as of December 31, 1957. It is expected that this number will increase to 121 by the close of 1958.

ARIZONA

Activities	Calend	lar Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	4,035	6,051	+49.9
No. Reactor Herds	246	360	+46.3
Percent	6.1	5.9	(-0.2)
No. Cattle Tested	50,802	129,430	+154.8
No. Reactor Cattle	704	1,134	+61.1
Percent	1.4	0.9	(0.5)
Reactors Slaughtered	465	810	+74.2
Percent	66.1	71.4	(+5.3)
Ring Tests			
No. Herds Tested	1,114	479	-57.1
No. Susp. Herds	249	102	-59.4
Percent	22.3	21.2	(-1.1)
Vaccinations	10,816	14,293	+32.1
Certifications			
New Counties	0	8	
Counties Removed	0	0	
Total Cert. Counties	0	8	

() % difference

State legislation providing for brucellosis eradication work on a complete area basis in Arizona was strengthened by passage of amendments to the law tightening restrictions on the disposition of reactors. All reactors are to be disposed of by July 14, 1959, and retention of reactors is not permitted in designated brucellosisfree areas. Written quarantine notices are used in area test work and dairy and beef cattle owners have been very cooperative.

It is anticipated that all counties with the exception of Maricopa will be certified by December 31, 1958.

At the present time, there is no State program for the establishment and maintenance of brucellosis-free swine herds.

ARKANSAS

Activities	Calend	dar Year	Percent Change				
	1956	1957	for 1957				
Blood Tests							
No. Herds Tested	10,849	23,306	+114.8				
No. Reactor Herds	2,189	3,133	+43.1				
Percent	20.2	13.4	(-6.8)				
No. Cattle Tested	128,181	307,553	+139.9				
No. Reactor Cattle	4,972	7,789	+56.7				
Percent	3.9	2.5	(-1.4)				
Reactors Slaughtered	4,577	7,308	+59.7				
Percent	92.1	93.8	(+1.7)				
Ring Tests							
No. Herds Tested	36,167	20,908	-42.2				
No. Susp. Herds	10,316	4,826	-53.3				
Percent	28.5	23.0	(-5.5)				
Vaccinations	87,224	131,008	+50.1				
Certifications							
New Counties	0	6					
Counties Removed	0	0					
Total Cert. Counties	0	6					

() % difference

The brucellosis eradication program in Arkansas has expanded to the limit of available funds. One deficiency in the program resulted from failure of the State Legislature at its last session to pass an auction barn law. However, the Legislature did enact two laws which are proving beneficial to the program; one inaugurating Statewide compulsory calfhood vaccination and the other providing for complete area work.

Local brucellosis committees have been very helpful in sponsoring meetings for the purpose of publicizing the program. They have also taken an active part in obtaining signatures on petitions requesting area testing.

Technicians are being used extensively in the Arkansas program. Carefully selected, well-trained and properly-supervised lay personnel have proved entirely satisfactory in carrying out many of brucellosis project operations.

The anticipated goals for calendar year 1958 are: (a) 25 counties to be initially certified; (b) area work will be in progress in 36 counties; (c) 31 counties will be qualified as certified.

The Statewide certification goal is 1960, which does not represent any change.

There is no program or provision for the establishment and maintenance of brucellosis-free swine herds in Arkansas.

Activities	Calend	lar Year_	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	11,884	4,304	-63.8
No. Reactor Herds	1,155	707	-38.8
Percent	9.7	16.4	(+6.7)
No. Cattle Tested	88,138	95,061	+7.9
No. Reactor Cattle	2,903	1,420	-51.1
Percent	3.3	1.5	(-1.8)
Reactors Slaughtered	1,927	1,499	-22.3
Percent	66.4	105.6	(+39.2)
Ring Tests			
No. Herds Tested	570	1,382	+142.4
No. Susp. Herds	233	393	+68.6
Percent	40.8	28.4	(-12.4)
Vaccinations	343,562	379,260	+10.3
Certifications			
New Counties	0	1	
Counties Removed	0	0	
Total Cert. Counties	0	1	

() % difference

The brucellosis program was accelerated considerably since September 1957, when the State laws in California providing for brucellosis eradication work on an area basis became effective. A total of 21 counties have been declared in the process of certification and one county has qualified as the initial certified area. It is anticipated that 38 counties will be operating on an area basis as of December 31, 1958, and that 10 counties will have been certified by that time. It is expected that the entire State will be certified by June 30, 1960 provided sufficient funds are made available.

The State brucellosis regulations were amended to terminate adult vaccination as of January 1, 1957 and to withdraw privileges as official vaccinates for such animals as of July 1, 1958. BRT trailer laboratories continue to play an important part in the brucellosis eradication program.

More personnel are needed to supervise properly the brucellosis eradication program in California. The practice of vaccinating dairy calves when they are over eight months of age also is a problem in California which continues to cause difficulties.

Provisions are available in California for the establishment and maintenance of brucellosis-free swine herds. As of December 31, 1957, there were 14 certified brucellosis-free swine herds in the State.

COLORADO

Activities	Calend	lar Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	10,583	12,152	+14.8
No. Reactor Herds	754	743	-1.5
Percent	7.1	6.1	(-1.0)
No. Cattle Tested	73,699	160,733	+118.1
No. Reactor Cattle	1,405	1,463	+4.1
Percent	1.9	0.9	(-1.0)
Reactors Slaughtered	1,334	1,208	-9.5
Percent	94.9	82.6	(-12.3)
Ring Tests			
No. Herds Tested	28,023	17,950	-36.0
No. Susp. Herds	98 7	559	-43.4
Percent	3.5	3.1	(-0.4)
Vaccinations	75,744	112,898	+49.0
Certifications			
New Counties	0	2	
Counties Removed	0	0	
Total Cert. Counties	0	2	

() % difference

New Colorado regulations became effective in April 1957 which provide for the conduct of brucellosis eradication on an area basis in conformity with the Uniform Methods and Rules. County brucellosis committees continue to be active in circulating petitions, calling meetings, and otherwise promoting the program.

It is expected that 30 counties will be certified by December 31, 1958, and that area work will be in progress in a total of 46 counties, provided funds are made available. The goal for State-wide certification is June 30, 1960.

No provisions are available in Colorado for the establishment and maintenance of brucellosis-free swine herds.

CONNECTICUT

Activities	Calend	ar Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	8,904	6,995	-21.5
No. Reactor Herds	875	405	-53.8
Percent	9.8	5.8	(-4.0)
No. Cattle Tested	164,575	102,605	-37.7
No. Reactor Cattle	1,545	569	-63.2
Percent	0.9	0.6	(-0.3)
Reactors Slaughtered	166	598	+260.2
Percent	10.7	105.1	(+94.4)
Ring Tests			
No. Herds Tested	4,691	4,663	-0.6
No. Susp. Herds	909	428	-47.1
Percent	19.3	9.1	(-10.2)
Vaccinations	18,837	17,025	-9.7
Certifications			
New Counties	0	8	
Counties Removed	0	0	
Total Cert. Counties	0	8	

() % difference

A revision of Connecticut's brucellosis law became effective April 1, 1957. This provides for indemnity payments on reactors, slaughter of all reactors, quarantine of infected herds, and incorporates the ring test into the official program. As a result, Connecticut qualified as a certified State on July 26, 1957, ten months prior to the goal previously established. Local brucellosis committees were effective in stimulating enthusiasm for the drive toward Statewide certification. Efforts are being directed toward a further reduction in the incidence of brucellosis by increased efforts to locate and remove remaining infection foci.

There are no general provisions in this State for the certification of brucel-losis-free swine herds. However, there is a section in the State law that requires blood testing of all swine herds maintained on the same premises with dairy cattle. This section reads as follows: "After April 1, 1957, no swine or goats used for breeding purposes shall be kept on the same premises as cattle unless such swine or goats are certified free from brucellosis. Any positive reactors shall be immediately slaughtered and the premises cleaned and disinfected."

DELAWARE

Activities	Calend	ar Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	3,185	1,985	-37.7
No. Reactor Herds	145	44	-69.7
Percent	4.6	2.2	(-2.4)
No. Cattle Tested	44,064	35,719	-19.0
No. Reactor Cattle	311	53	-83.0
Percent	0.7	0.1	(-0.6)
Reactors Slaughtered	378	98	-74.1
Percent	121.5	184.9	(+63.4)
Ring Tests			
No. Herds Tested	1,699	2,176	+28.0
No. Susp. Herds	126	90	-28.6
Percent	7.4	4.1	(-3,3)
Vaccinations	5,213	5,666	+8.6
Certifications			
New Counties	2	1	
Counties Removed	0	0	
Total Cert. Counties	2	3	

() % difference

Delaware achieved State-wide certification on January 10, 1957. Since that time the program has been directed toward the maintenance of this status and further reduction of infection rates.

During the year improved control over the movement of cattle from auction markets to farms was attained.

Although the State brucellosis committee is still in existence it was not active during 1957.

Infection rates at the time State-wide certification was granted were quite low - 1.16 percent herd and 0.33 percent animal. Consequently, it is proving difficult to further reduce the incidence.

No provisions for State certification of brucellosis-free swine herds are available in Delaware. Owners of the small swine population in the State have exhibited very little interest in such a program to date.

Activities	Çalend 1956	lar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	13,175	16,867	+28.0
No. Reactor Herds	957	878	-8.3
Percent	7.3	5.2	(-2.1)
No. Cattle Tested	229,455	264,495	+15.3
No. Reactor Cattle	4,980	3,015	-39.5
Percent	2.2	1.1	(-1.1)
Reactors Slaughtered	4,083	2,396	-41.4
Percent	82.0	79.5	(-2.5)
Ring Tests			
No. Herds Tested	5,493	6,469	+17.7
No. Susp. Herds	2,800	3,635	+29.8
Percent	50.9	56.1	(+5.2)
Vaccinations	84,347	99,400	+17.8
Certifications			
New Counties	1	13	
Counties Removed	0	0	
Total Cert. Counties	1	14	

Good progress has been made in the Florida brucellosis eradication program despite a lack of State funds for additional personnel and a reluctance on the part of practicing veterinarians to participate fully in area testing.

The most significant improvements incorporated into the program during the past year was adoption by the State of the Federal Interstate Brucellosis Regulation governing the admission of cattle, prohibiting adult vaccination after December 31, 1957, and requiring by regulation that with minor exceptions all cattle brought into Florida for dairy and breeding purposes after December 31, 1957 be official calfhood vaccinates.

The State Brucellosis Committee has been helpful in the interest of the program. However, there are no Committees organized on a local level.

Based on current work, it is estimated that ten counties will be initially certified during the year, with complete area testing in 4 additional counties at the close of the year. A total of 24 counties should be certified by December 31, 1958. The State certification goal of 1960 remains unchanged.

Florida regulations provide for a brucellosis-free swine certification program but so far the industry has shown very little interest in the problem. During the year, three new swine herds were certified making a total of seven. It is anticipated there will be about 27 brucellosis-free swine herds in the State by December 31, 1958.

GEORGIA

Activities	Calend	ar Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	25,252	55,022	+117.9
No. Reactor Herds	2,391	4,548	+90.2
Percent	9.5	8.3	(-1.2)
No. Cattle Tested	363,245	752,731	+107.2
No. Reactor Cattle	7,869	9,694	+23.2
Percent	2.2	1.3	(-0.9)
Reactors Slaughtered	6,036	8,348	+38.3
Percent	76.7	.86.1	(+9.4)
Ring Tests			
No. Herds Tested	8,379	8,167	-2.6
No. Susp. Herds	2,696	1,995	-24.2
Percent	32.1	24.4	(-7.7)
Vaccinations	38,850	42,585	+9.6
Certifications			
New Counties	1	23	
Counties Removed	7	0	
Total Cert. Counties	1	24	

() % difference

To the limit of available funds, excellent progress has been made in furthering brucellosis activities in Georgia. There are no recognized major deficiencies in the program as now constituted. In most of the counties under area test, there have been a few herds located in swampy or otherwise ranges which have delayed the work. Also, recent heavy infestation of screwworms has retarded blood testing to some extent.

The State has broadened the use of agricultural employees by expanding the roles played by Extension Service and vocational personnel. In many counties prison labor has been utilized to good advantage in building chutes and in restraining cattle for tests. Local brucellosis committees have made valuable and extensive contributions to the success of the program.

If present operating levels are continued, it is estimated that 80 counties will be certified during calendar year 1958 and that complete area testing will be in progress in 36 additional counties by the close of the year. A total of 104 counties should be qualified at the end of the calendar year 1958. Although January 1, 1960 remains the target date for statewide certification, it should be attained earlier if the present rate of progress is maintained.

There are provisions in Georgia for certification of brucellosis-free swine herds. This program is well accepted by the purebred breeders. However, there is considerable interest in inaugurating certification on a county basis. During the year eight new swine herds were certified, making a total of ten. By December 31, 1958, it is estimated that this number will increase to thirty.

Activities	Calend	ar Year	Percent Change
-	1956	1957	for 1957
Blood Tests			
No. Herds Tested	9,386	9,308	-0.9
No. Reactor Herds	1,525	1,132	-25.8
Percent	16.2	12.2	(-4.0)
No. Cattle Tested	135,992	170,642	+25.5
No. Reactor Cattle	3,050	2,287	-25.1
Percent	2.2	1.3	(-0.9)
Reactors Slaughtered	2,941	2,373	-19.4
Percent	96.4	103.8	(+7.4)
Ring Tests			
No. Herds Tested	38,219	33,807	-11.6
No. Susp. Herds	4,512	3,414	-24.3
Percent	11.8	10.0	(-1.8)
Vaccinations	128,369	144,459	+12.5
Certifications			
New Counties	1	5	
Counties Removed	0	0	
Total Cert. Counties	9	14	

All counties in Idaho have been declared brucellosis test areas, but because of the shortage of veterinary personnel, efforts are concentrated on the counties that can be certified within the 18 month limitation that has been established. It is anticipated that 26 to 28 of the State's 44 counties will be certified by the end of the current calendar year.

The goal for Statewide certification is still 1960.

The brucellosis program has been strengthened during the past year by the application of quarantines on infected herds until they have passed two negative tests. The over-all infection rate is continuing its decline.

There are no provisions for the certification of brucellosis-free swine herds in Idaho. However, all breeding swine entering the State are required to be tested, and all breeding animals at purebred swine sales are required to be tested. Voluntary swine herd testing is available at State expense.

Activities	Calendar Year		Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	67,686	61,700	-8.9
No. Reactor Herds	4,636	3,621	-21.9
Percent	6.8	5.9	(-0.9)
No. Cattle Tested	619,663	595,940	-3.9
No. Reactor Cattle	9,388	7,844	-16.5
Percent	1.5	1.3	(-0.2)
Reactors Slaughtered	7,028	6,541	-7.0
Percent	74.9	83.4	(+8.5)
Ring Tests			
No. Herds Tested	85,567	79,316	-7.4
No. Susp. Herds	6,460	3,047	-42.9
Percent	7.5	3.8	(-3.7)
Vaccinations	138,493	143,543	+3.6
Certifications			
New Counties	0	0	
Counties Removed	0	0	
Total Cert. Counties	0	0	

Adequate legislation for conducting area brucellosis eradication work became effective in Illinois on July 1, 1957. Funds for the payment of indemnity were made available on the same date. Progress since July 1, 1957 has been excellent.

The goal for State-wide certification has been advanced from December 31, 1960 to January 1, 1960. Thirty counties are expected to be initially certified during 1958, with area work under way in 60 of the 102 counties in the State.

Recent legislation requires all dairy and breeding herds of cattle to be under an approved plan for the eradication of brucellosis. Any county with less than 3 percent cattle infection may be declared an area for brucellosis certification purposes by the Director of Agriculture. All herds in any county so declared must follow the provisions of Plan A.

Local brucellosis committees have been very helpful in sponsoring the program. The committees have furnished helpers for outside veterinarians working in counties which do not have practicing veterinarians.

The main hindrance to the program is the lack of practicing veterinarians in many of the southern counties.

Provisions for the certification of brucellosis-free swine herds by the State are in existence. Illinois law prohibits the sale of female swine 4 months of age and over for breeding purposes and the sale or service of any male swine for breeding purposes, unless such swine have been tested by the blood agglutination test within 60 days and do not show a reaction higher than 1:25.

Five swine herds are presently certified and it is anticipated that at least five additional herds will be added in 1958.

Activities	Calend	ar Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	67,834	48,429	-28.7
No. Reactor Herds	7,583	5,449	-28.2
Percent	11.2	11.3	(+0.1)
No. Cattle Tested	812,804	663,601	-18.4
No. Reactor Cattle	15,380	10,654	-30.8
Percent	1.9	1.6	(-0.3)
Reactors Slaughtered	14,049	10,506	-25.3
Percent	91.3	98.6	(+7.3)
Ring Tests			
No. Herds Tested	95,258	91,568	-3.9
No. Susp. Herds	7,197	3,280	-54.4
Percent	7.6	3.5	(-4.1)
Vaccinations	60,216	65,133	+8.1
Certifications			
New Counties	18	17	
Counties Removed	0	0	
Total Cert. Counties	19	36	

The brucellosis program in Indiana has progressed at a faster rate than anticipated. Every county except one has petitioned for area work and been declared under the complete area eradication plan. Local brucellosis committees have done a fine job of circulating petitions.

Adequate legislation and funds have been available to carry out the program and January 1, 1960 remains the goal for State-wide certification of Indiana. The forty-two counties executed to be initially certified during calendar year 1958, will bring the State total to 78. During 1958 area work will be in progress in all remaining counties except one (Knox County).

The principal deterrent to the program is poor cooperation on the part of a very small minority of herd owners. Occasional difficulties are encountered in securing the services of fee-testing veterinarians to implement the work.

Provisions are available in Indiana for the certification of brucellosis-free swine herds. There is some sentiment for a voluntary "area brucellosis eradication field trial". At present, there are 86 swine herds certified brucellosis-free and this number is expected to increase during the year.

Activities	Calend	lar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	38,993	43,682	+12.0
No. Reactor Herds	8,334	5,853	-29.8
Percent	21.4	13.4	(-8.0)
No. Cattle Tested	394,761	407,673	+3.3
No. Reactor Cattle	17,093	12,453	-27.2
Percent	4.3	3.1	(-1.2)
Reactors Slaughtered	17,592	13,496	-23.3
Percent	102.9	108.4	(+5.5)
Ring Tests			
No. Herds Tested	195,127	179,226	-8.2
No. Susp. Herds	26,424	17,228	-34.9
Percent	13.4	9.6	(-3.8)
Vaccinations	211,240	228,411	+8.1
Certifications			
New Counties	0	0	
Counties Removed	0	0	~ = ~
Total Cert. Counties	0	0	

Significant improvements were made in the Iowa brucellosis program during 1957 through enactment into law of authority to conduct brucellosis control and eradication work on a complete area basis after so petitioned by owners. Supporting regulations providing for the quarantine of infected herds, and passage of laws requiring negative brucellosis tests before sale of bovine animals will materially aid the program.

In addition to the lack of authority for complete area work which existed during most of 1957, the program has been handicapped because of the inability to conduct appropriate follow-up blood tests on BRT suspicous herds and retests of infected herds.

County brucellosis committees are rendering valuable assistance in obtaining the necessary signatures to petitions for complete area work. It is anticipated that three counties will be certified and complete area work under way in twelve other counties by December 31, 1958.

Based upon delayed progress to date and anticipated reduction in available funds, the goal for State-wide certification has been changed from 1960 to 1965. It is believed that if sufficient funds and personnel were provided, the goal could be attained considerably earlier than 1965.

Provisions are available in Iowa for a voluntary brucellosis-free swine certification program. During 1957, sixteen new herds were certified making a total of 102 herds so designated at the end of the year. It is not expected that this total will materially change during 1958.

Activities	Calend 1956	lar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	18,167	19,302	+6.2
No. Reactor Herds	2,634	2,794	+6.1
Percent	14.5	14.5	(0.0)
No. Cattle Tested	194,176	202,780	+4.4
No. Reactor Cattle	5,444	5,092	-6.5
Percent	2.8	2.5	(-0.3)
Reactors Slaughtered	4,888	4,989	+2.1
Percent	89.8	98.0	(+8.2)
Ring Tests			
No. Herds Tested	58,841	68,674	+16.7
No. Susp. Herds	7,488	9,189	+22.7
Percent	12.7	13.3	(+0.6)
Vaccinations	123,827	219,578	+77.3
Certifications			
New Counties	0	0	
Counties Removed	0	0	
Total Cert. Counties	0	0	

The brucellosis eradication program in Kansas is still being retarded by a lack of sufficient funds and the absence of an organized area program. It would appear that an expanded informational campaign would materially help the brucellosis eradication effort in this State. Where local brucellosis committees are active they have contributed to promotion of the program.

The anticipated goals for the calendar year 1958 are: (a) three counties to be initially certified and (b) area work to be in progress in three other counties.

The Statewide certification goal is June, 1961. This represents a change from the December 31, 1961 date originally established.

There is no provision for the establishment and maintenance of brucellosis-free swine herds in Kansas.

KENTUCKY

Activities	Calend	dar Year	Percent Change
The state of the s	1956	1957	for 1957
Blood Tests			
No. Herds Tested	14,677	37,051	+152.4
No. Reactor Herds	2,379	5,006	+110.4
Percent	16.2	13.5	(-2.7)
No. Cattle Tested	188,270	365,968	+94.4
No. Reactor Cattle	5,939	10,151	+70.9
Percent	3.2	2.8	(-0.4)
Reactors Slaughtered	5,318	11,028	+107.4
Percent	89.5	108.0	(+18.5)
Ring Tests			
No. Herds Tested	28,217	58,763	+108.2
No. Susp. Herds	7,553	10,615	+40.5
Percent	26.7	18.0	(-8.7)
Vaccinations	37,175	58,066	+56.1
Certifications			
New Counties	0	2	
Counties Removed	0	0	
Total Cert. Counties	0	2	

() % difference

An unexpected increase of infection rates disclosed in some areas of Kentucky during the year resulted in the expenditure of a larger share of available brucellosis funds in the State than anticipated with a consequent necessity for restricting activities. This lack of adequate State and Federal funds together with an acute shortage of veterinary personnel constituted the major program weaknesses noted during the past year.

The State brucellosis committee has been enlarged to include all segments of the livestock industry. County committees are quite active and have worked with the Extension Service in developing and distributing informational material relative to the program.

The State-wide certification goal is still December 31, 1960.

It is expected that ten counties will be certified and area work underway in 16 other counties by the end of calendar year 1958. A total of 12 counties should be qualified for certification as of December 31, 1958.

There are no certified brucellosis-free swine herds in Kentucky at this time. However, plans are under consideration for developing State provisions relative to the establishment of such herds.

LOUISIANA

Activities	Calend	lar Year	Percent Change	
	1956	1957	for 1957	
Blood Tests				
No. Herds Tested	17,993	32,740	+81.9	
No. Reactor Herds	5,287	7,266	+37.4	
Percent	29.4	22.2	(-7.2)	
No. Cattle Tested	345,492	529,436	+53.2	
No. Reactor Cattle	17,886	23,818	+33.2	
Percent	5.2	4.5	(-0.7)	
Reactors Slaughtered	17,988	26,176	+45.5	
Percent	100.6	109.9	(+9.3)	
Ring Tests				
No. Herds Tested	7,371	7,559	+2.5	
No. Susp. Herds	3,796	3,431	-9.7	
Percent	51.4	45.3	(-6.1)	
Vaccinations	96,991	106,558	+9.8	
Certifications				
New Counties	0	0		
Counties Removed	0	0		
Total Cert. Counties	0	0		

() % difference

The brucellosis eradication program continues to progress in Louisiana although it has not reached its full potential because of lack of sufficient funds. The high rate of infection being disclosed is also a retarding factor in advancing the project.

There have been two significant improvements in the program: (1) the inauguration of area testing and (2) the adoption of a State regulation governing the sale of breeding cattle auction markets.

Local brucellosis committees have been quite active in some parishes through arranging meetings with local groups and helping to circulate petitions requesting area work.

The anticipated goals for the calendar year 1958 are: (a) 10 counties to be initially certified, (b) area work will be in progress in 20 counties and (c) a total of 10 counties will be qualified as certified by December 31, 1958.

The Statewide certification goal of 1960 remains unchanged.

There are provisions in Louisiana for the certification of brucellosis-free swine herds. Acceptance of the brucellosis program by the swine industry has been limited only by the possibility of building up the program with available personnel and funds. No new swine herds were certified during calendar year 1957. The total number of certified brucellosis-free swine herds in Louisiana as of December 31, 1957, was two. The anticipated number of brucellosis-free swine herds in Louisiana as of December 31, 1958 is three to six. Several purebred breeders are interested in herd certification and in a program similar to the bovine brucellosis project. The testing carried out so far indicates a lower percentage of infection in Louisiana swine than in cattle. During 1957, 273 herds were tested, including 1,197 swine. Only three reactors were revealed on these tests.

Activities	Calend 1956	ar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	4,229	6,386	+51.0
No. Reactor Herds	312	221	-29.2
Percent	7.4	3.5	(-3.9)
No. Cattle Tested	69,002	69,993	+1.4
No. Reactor Cattle	457	318	-30.5
Percent	0.7	0.5	(-0.2)
Reactors Slaughtered	508	374	-26.4
Percent	111.2	117.6	+6.4
Ring Tests			
No. Herds Tested	8,834	9,303	+5.3
No. Susp. Herds	97	93	-4.2
Percent	1.1	0.9	(-0.2)
Vaccinations	10,188	13,736	+34.8
Certifications	·		
New Counties	0	0	
Counties Removed	0	0	
Total Cert. Counties	16	16	

Maine has enjoyed a Modified Certified Brucellosis-free status since July 1950, and was the third State to reach this goal.

There are no significant deficiencies apparent in the program as now constituted. Increased activities are being directed toward locating and removing all remaining sources of infection. The ring test is routinely applied to all dairy herds on a semi-annual basis with prompt follow-up blood tests of suspicious herds. All herds not covered by the ring test are blood tested at least once in three years. Attention is being given to tracing sources of infection when reactors are found.

Interest on the part of cattle owners in the vaccination of calves has been stimulated as a result of certain importing States accepting only vaccinated animals.

Provisions are not available in Maine for the establishment and maintenance of brucellosis-free swine herds.

MARYLAND

Caler	ndar Year	Percent Change
1956	1957	for 1957
18,373	20,693	+12.6
1,189	603	-49.3
6.5	2.9	(-3.6)
51,705	338,412	-3.8
1,997	965	-51.7
0.6	0.3	(-0.3)
2,736	1,413	-48.4
137.0	146.4	(+9.4)
3,359	694	-79.3
415	73	-82.5
12.3	10.5	(-1.8)
47,930	53,068	+10.7
0	6	
1	0	
3	9	
	18,373 1,189 6.5 551,705 1,997 0.6 2,736 137.0 3,359 415 12.3 47,930	18,373 20,693 1,189 603 6.5 2.9 51,705 338,412 1,997 965 0.6 0.3 2,736 1,413 137.0 146.4 3,359 694 415 73 12.3 10.5 47,930 53,068

() % difference

Although progress is being made in the Maryland brucellosis eradication program, wider acceptance and use of the brucellosis ring-test would contribute to more rapid advancements. Also, the project has been retarded by a serious shortage of supervisory personnel. It is unfortunate that local brucellosis committees are not taking a more active part in promoting the Maryland program.

It is anticipated that 11 counties will be certified and complete area work underway in 12 other counties by the end of calendar year 1958.

The goal for State-wide certification is still 1960.

While provisions for the establishment and maintenance of brucellosis free swine herds are available in Maryland, there seems to be very little interest in this program except for owners having a need for meeting sales requirements. There is reason to believe the certification of swine herds could be expanded if tests were conducted without expense to owners.

MASSACHUSETTS

Activities	Calendar Year		Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	5,783	8,111	+40.3
No. Reactor Herds	661	605	-8.5
Percent	11.4	7.5	(-3.9)
No. Cattle Tested	89,087	109,929	+23.4
No. Reactor Cattle	987	982	-0.6
Percent	1.1	0.9	(-0.2)
Reactors Slaughtered	939	1,002	+6.7
Percent	95.1	102.0	(+6.9)
Ring Tests			
No. Herds Tested	8,022	5,830	-27.4
No. Susp. Herds	3,125	1,385	-55.7
Percent	38.9	23.7	(-15.2)
Vaccinations	18,604	16,096	13.5
Certifications	·	·	•
New Counties	1	2	
Counties Removed	0	0	
Total Cert. Counties	1	3	

() % difference

Improvements incorporated into the Massachusetts program during the calendar year included provisions the State's participation in the payment of brucellosis indemnities; plans to concentrate on area certification work, the discontinuance of routine herd certifications, and wider use of milk ring tests to locate suspicous Brucella infected herds.

County Brucellosis Committees were active during the year in obtaining legislation to increase State brucellosis funds for the payment of indemnities, and holding meetings to discuss progress reports covering the program.

Three of the fourteen counties in the State are certified brucellosis-free. It is anticipated that the remaining eleven counties will qualify by December 31, 1958. This represents a change from the previously reported goal of January 1, 1960.

There are no provisions for the certification of brucellosis-free swine herds.

Activities	Calend 1956	dar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	50,513	46,200	-8.6
No. Reactor Herds	5,820	5,213	-10.5
Percent	11.5	11.3	(-0.2)
No. Cattle Tested	448,488	444,421	-1.0
No. Reactor Cattle	14,998	12,324	-17.9
Percent	3.3	2.8	(-0.5)
Reactors Slaughtered	11,259	12,370	+9.9
Percent	75.1	100.4	(+25.3)
Ring Tests			
No. Herds Tested	64,075	59,640	-7.0
No. Susp. Herds	8,922	4,518	-49.4
Percent	1.2	7.5	(+6.3)
Vaccinations	50,947	63,348	+24.3
Certifications			
New Counties	0	44	
Counties Removed	14	3	
Total Cert. Counties	15	56	

June 30, 1958 remains the goal for state-wide certification of Michigan. Twenty-seven of the 83 counties in the State are still to be certified during the first six months of 1958. Legislation and funds are adequate to achieve this goal. No significant deficiencies are apparent in the Michigan program. Local brucellosis committees, the Extension Service, and the Livestock industry are contributing greatly toward successful promotion of the program.

The Michigan program is designed to achieve complete eradication as soon as possible after certification is complete. It is estimated that the state-wide infection rate on December 31, 1958 will be 3.7 percent herds and 0.5 percent cattle.

There is no program for the certification of swine herds at this time. However, such a program is under consideration. A survey is being made through testing of blood samples obtained at local slaughtering establishments to determine the extent of swine brucellosis in the State.

Activities	Calen	dar Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	73,523	68,088	-7.4
No. Reactor Herds	9,438	6,124	-35.2
Percent	12.8	9.0	(-3.8)
No. Cattle Tested	1,531,365	1,336,868	-12.8
No. Reactor Cattle	20,014	12,859	-35.8
Percent	1.3	1.0	(-0.3)
Reactors Slaughtered	20,944	14,280	-31.9
Percent	104.6	111.1	(+6.5)
Ring Tests			
No. Herds Tested	200,942	186,394	-7.3
No. Susp. Herds	10,390	6,479	-37.7
Percent	5.2	3.4	(-1.8)
Vaccinations	148,561	172,122	+15.8
Certifications			
New Counties	16	11	
Counties Removed	1	0	
Total Cert. Counties	76	87	

On May 31, 1957, Minnesota became the seventh State to attain state-wide certification. Those responsible for the program in Minnesota recognize the fact that attainment of this status is only an important milestone on the road toward complete eradication of bovine brucellosis. Increased efforts are being made to locate and remove residual foci of infection.

Although the program as presently designed is effective, considerable savings in funds and personnel could be made by a wider acceptance of the results of ring test operations.

During 1957 legislation was enacted which requires the prompt removal of all reactors and their slaughter within 15 days after branding and appraisal.

Considerable credit must be given to the practicing veterinarians in Minnesota for bringing to a successful conclusion the initial stage of the eradication program. Through their continued cooperation final and complete eradication should be attainable.

It is estimated that the herd infection rate will be reduced to 1.9 percent and the cattle infection rate to 0.15 percent by December 31, 1958.

Provisions are available for certifying brucellosis-free swine herds. As of December 31, 1957, there was one such herd in Minnesota.

Activities	Calend	lar Year_	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	20,444	45,775	+123.9
No. Reactor Herds	2,909	4,151	+42.7
Percent	14.2	9.1	(-5.1)
No. Cattle Tested	299,734	583,538	+94.7
No. Reactor Cattle	6,506	10,802	+66.0
Percent	2.2	1.9	(-0.3)
Reactors Slaughtered	6,399	10,293	+60.9
Percent	98.4	95.3	(-3.1)
Ring Tests			/
No. Herds Tested	34,642	32,925	-5.0
No. Susp. Herds	5,899	4,718	-20.1
Percent	17.0	14.3	(-2.7)
Vaccinations	110,039	130,781	+18.8
Certifications			
New Counties	0	5	
Counties Removed	0	0	
Total Cert. Counties	0	5	

The brucellosis eradication program in Mississippi continues to make excellent progress. The greatest deficiency in the program is failure to complete area testing on scheduled target dates.

Two significant improvements in the program have been; (1) a new Mississippi State Regulation requires the testing of all breeding cattle going from livestock markets to farms in Mississippi; (2) the recognition by the State Board of Health of the BRT, resulting in the exemption from blood test of herds in area counties which have passed two consecutive negative milk ring tests and herds outside of area counties which have passed three consecutive negative milk ring tests.

Local brucellosis committees have been very active in the program and particularly helpful in securing the adoption of area testing.

The anticipated goals for the calendar year 1958 are: (a) 25 counties to be initially certified (b) area work will be in progress in 45 counties and (c) a total of 30 counties certified by December 31, 1958.

The Statewide certification goal of January 1960, does not represent a change from the date originally established.

There are no provisions for the establishment and maintenance of brucellosis-free swine herds in Mississippi.

Activities	Calen 1956	dar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	86,267	84,904	-1.6
No. Reactor Herds	9,730	8,729	-10.3
Percent	11.3	10.3	(-1.0)
No. Cattle Tested	981,969	1,028,419	+4.7
No. Reactor Cattle	20,610	17,707	+14.1
Percent	2.1	1.7	(-0.4)
Reactors Slaughtered	22,924	19,945	(+13.0)
Percent	111.2	112.6	(+1.4)
Ring Tests			
No. Herds Tested	122,488	117,482	-4.1
No. Susp. Herds	17,115	13,821	-19.3
Percent	13.9	11.7	(-2.2)
Vaccinations	219,132	280,426	(+27.9)
Certifications			
New Counties	0	2	
Counties Removed	0	0	
Total Cert. Counties	0	2	

Blood testing for brucellosis continues to break all previous records in Missouri, largely due to the number of counties under area work. The major deficiency in the program is the inability to complete area testing on scheduled dates.

The most significant improvement in the program is the placing of quarantines on infected herds where sale barn reactors are found, as well as herds which are suspicious to the milk ring test.

Local brucellosis committees are now designated "Livestock Disease Control Committees", and have been very active, in cooperation with the Extension Service, in contributing to the advancement of the program.

The anticipated goals for the calendar year 1958 are: (a) 46 counties to be initially certified; (b) area work will be in progress in 66 counties and (c) a total of 48 counties certified by December 31, 1958.

The Statewide certification goal is 1960.

There are no provisions for the establishment and maintenance of brucellosisfree swine herds in Missouri.

Activities	Calendar Year		Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	14,839	9,537	-36.2
No. Reactor Herds	1, 374	665	-51.7
Percent	9.3	7.0	(-2.3)
No. Cattle Tested	387,800	214,779	-44.7
No. Reactor Cattle	4,015	1,724	-57.1
Percent	1.3	0.8	(-0.5)
Reactors Slaughtered	3,173	1,768	-44.3
Percent	79.0	102.6	(+23.6)
Ring Tests			
No. Herds Tested	693	2,187	+213.9
No. Susp. Herds	49	59	+20.4
Percent	7.0	2.6	(-4.4)
Vaccinations	318,184	297,027	-6.7
Certifications			
New Counties	16	16	
Counties Removed	0	0	
Total Cert. Counties	27	43	

Adequate legislation is available for Montana to conduct brucellosis eradication work on an area basis. However, the livestock people of one county have failed to petition for area work and it is doubtful if Montana will reach certification by the end of 1958. It is anticipated that 54 of the 56 counties in the State will be certified by June 30, 1958, and the 55th county should reach certification during the last half of the year.

The goal of July 1, 1958 for achieving Statewide certification has been changed to December 31, 1958.

The county and State brucellosis committees have functioned very successfully in the State. The county committees have assumed the responsibility for circulating petitions for area testing and have contributed an important service to the brucellosis program in this regard.

Statewide coverage with the BRT was inaugurated during the past year. With so many of the counties certified or nearing certification, efforts are being concentrated on the reduction of the number of quarantined herds.

Montana continues to have difficulty in servicing their program because of the shortage of veterinarians. Twenty-six (26) counties of the State do not have veterinary practitioners. Technicians have been used in the testing and vaccinations and have performed very satisfactorily.

There are no provisions for certified brucellosis-free swine herds, even though there is authority for the adoption of the necessary regulations for such a program. Only brucellosis-free breeding swine are allowed entry into the State.

Activities	Calend 1956	dar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	33,214	26,098	-21.5
No. Reactor Herds	2,976	2,015	-32.3
Percent	9.0	7.7	(-1.3)
No. Cattle Tested	419,352	304,398	+27.5
No. Reactor Cattle	6,828	4,234	-38.0
Percent	1.6	1.4	(-0.2)
Reactors Slaughtered	6,274	3,816	-39.2
Percent	91.9	90.0	(-1.9)
Ring Tests			
No. Herds Tested	82,169	77,229	-6.1
No. Susp. Herds	3,549	2,912	-18.0
Percent	4.3	3.7	(-0.6)
Vaccinations	335,419	453,568	+35.2
Certifications			
New Counties	17	11	
Counties Removed	0	0	
Total Cert. Counties	20	31	

Authority for conducting brucellosis control and eradication on a complete area basis is provided in Nebraska by adequate legislation. State regulations were modified during 1957 to permit reactors to qualify for indemnity by disposal through local markets approved under the requirements of the Federal interstate brucellosis regulation. This change has aided in the prompt removal of reactors by establishing a more competitive market. The program has been immeasurably strengthened as a result of the Federal interstate regulation which became effective January 1, 1957.

A shortage of veterinary personnel appears to be the greatest handicap to further expansion of the program in Nebraska.

The State Brucellosis Committee was responsible during the year for an increased educational campaign directed primarily toward the Western counties.

As of December 31, 1957, 31 of the 93 counties in Nebraska were certified. It is expected that this number will be increased to 76 by the end of calendar year 1958. Complete area work will be underway in the balance of the counties at the same time.

The goal established for Statewide certification has been changed from January 1, 1960 to 1961 as a result of failure of certain counties to petition for area work.

Provisions are available in Nebraska for the establishment and maintenance of brucellosis-free swine herds. However, interest in the swine program has been low, probably due to the fact that all swine testing is at the expense of the individual owner. Five swine herds were certified as of December 31, 1957.

Activities	Calend 1956	lar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	1,127	2,304	+104.4
No. Reactor Herds	158	243	+53.8
Percent	14.0	10.5	(-3.5)
No. Cattle Tested	34,339	91,982	+167.9
No. Reactor Cattle	588	714	+21.4
Percent	1.7	0.8	(-0.9)
Reactors Slaughtered	478	778	+62.8
Percent	81.3	109.0	(+27.7)
Ring Tests			
No. Herds Tested	480	346	-28.0
No. Susp. Herds	15	3	-80.0
Percent	3.1	0.8	(-2.3)
Vaccinations	55,490	75,754	(+36.5)
Certifications			
New Counties	3	4	
Counties Removed	0	0	
Total Cert. Counties	3	7	

The entire State of Nevada is now operating under complete area testing procedures. The shortage of veterinary personnel and, as in other range States, the limited time that herds are available for tests continue to slow down the program. However, progress has been made in the enforcement of State regulations.

The local brucellosis committees have participated in circulating petitions for area work.

The goal for complete State certification has been advanced from December 31, 1960 to January 1, 1960. It is anticipated that 14 of the 17 counties of the State will be certified by the close of calendar year 1958.

Provisions are not available for the certification of brucellosis-free swine herds in Nevada.

NEW HAMPSHIRE

Activities	Calendar Year		Percent Change	
	1956	1957	for 1957	
Blood Tests				
No. Herds Tested	7,011	6,361	-9.3	
No. Reactor Herds	60	39	-45.0	
Percent	0.9	0.6	(-0.3)	
No. Cattle Tested	92,293	82,411	-20.8	
No. Reactor Cattle	113	63	-44.3	
Percent	0.1	0.1	(0.0)	
Reactors Slaughtered	148	84	-43.3	
Percent	131.0	133.3	(+2.3)	
Ring Tests				
No. Herds Tested	678	615	-9.3	
No. Susp. Herds	27	41	+51.8	
Percent	3.9	6.6	(+2.7)	
Vaccinations	10,588	10,023	-5.4	
Certifications				
New Counties	0	0		
Counties Removed	0	0		
Total Cert. Counties	10	10		

() % difference

New Hampshire has been a Modified Certified Brucellosis-free State since August 1949. It was the second State to reach this goal.

Efforts are now being directed toward locating and removing remaining sites of infection in an effort to reach complete eradication. At the present time all herds are blood tested annually. Increased emphasis is being placed on tracing the origin of each reacting animal and to determine the source of infection.

Provisions are not available in New Hampshire for the establishment and maintenance of brucellosis-free swine herds.

Activities	<u>Calen</u> 1956	dar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	8,763	8,026	-8.5
No. Reactor Herds	1,081	939	-13.2
Percent	12.3	11.7	(-0.6)
No. Cattle Tested	205,579	184,122	-20.5
No. Reactor Cattle	2,163	1,910	-11.7
Percent	1.1	1.0	(-0.1)
Reactors Slaughtered	2,160	1,965	-9.1
Percent	99.9	102.9	(+3.0)
Ring Tests			
No. Herds Tested	1,950	2,975	+52.5
No. Susp. Herds	239	297	+24.2
Percent	12.2	9.9	(-2.3)
Vaccinations	17,004	16,597	-2.4
Certifications			
New Counties	1	10	
Counties Removed	0	0	
Total Cert. Counties	2	12	

The New Jersey program is moving toward certification in a consistent manner. As of January 1, 1957, mandatory quarantines of Brucella infected herds became effective and on July 1 the slaughter of reactors was required. These program improvements will be helpful in furthering the State's effort to achieve early certification.

Local brucellosis committees have been active in the State and instrumental in promoting certification work.

The current goal for State-wide certification is July 1, 1958. This represents a change from the January 1, 1959 date previously established.

Provisions for the establishment and maintenance of certified brucellosis-free swine herds are not available in New Jersey. However, some voluntary work is being carried out along these lines and most of the State institution herds are being blood tested. The majority of swine in the State are garbage fed.

NEW MEXICO

Activities	Calend	ar Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	4,477	15,755	+251.9
No. Reactor Herds	193	367	+90.2
Percent	4.3	2.3	(-2.0)
No. Cattle Tested	88,114	237,664	+169.7
No. Reactor Cattle	622	860	+38.3
Percent	0.7	0.4	(-0.3)
Reactors Slaughtered	359	903	+151.5
Percent	57.7	105.0	(+47.3)
Ring Tests			
No. Herds Tested	4,360	3,054	-30.0
No. Susp. Herds	211	101	-52.2
Percent	4.8	3.3	(-1.5)
Vaccinations	30,886	66,015	+113.7
Certifications			
New Counties	3	15	
Counties Removed	0	0	
Total Cert. Counties	3	18	

() % difference

Complete area work is being conducted in all New Mexico counties and July 1, 1958, has been set as the goal for achieving Statewide certification. In addition to the progress made toward reaching this goal, a significant improvement in the use of the BRT and its adoption by cooperating agencies has been achieved. Sufficient Federal personnel to meet program goals are now available in New Mexico.

Provisions are not available in New Mexico for the establishment and maintenance of brucellosis-free swine herds.

Activities	Calen	dar Year	Percent Change
Activities	1956	1957	for 1957
	1330	1331	101 1001
Blood Tests			
No. Herds Tested	54,649	30,696	-43.8
No. Reactor Herds	13,267	8,634	-35.0
Percent	24.3	28.1	(+3.8)
No. Cattle Tested	988,867	585,741	-40.8
No. Reactor Cattle	24,007	14,993	-37.6
Percent	2.4	2.6	(+0.2)
Reactors Slaughtered	13,917	16,524	+18.7
Percent	58.0	110.2	(+52.2)
Ring Tests			
No. Herds Tested	64,563	97,802	+51.4
No. Susp. Herds	13,326	14,259	+7.0
Percent	20.6	14.5	(-6.1)
Vaccinations	274,106	265,578	-3.1
Certifications			
New Counties	1	3	
Counties Removed	0	0	
Total Cert. Counties	1	4	·

Significant improvements made in the New York brucellosis program during calendar year 1957 included:

- 1. Obtaining increased cooperation and assistance from milk plant operators and dairy field men,
- 2. The development of improved regulations governing import requirements of cattle,
- 3. Increased use of the milk ring test.

Milk ordinances of nearby States relating to brucellosis have proved very beneficial to the expanded program. These requirements have stimulated herd owners to remove reactors promptly and retest their herds.

Four of the 62 counties in the State have achieved the status of Modified Certified Brucellosis-free Areas. Reluctance to quarantine infected herds is retarding certification work in certain other areas.

The current State-wide certification goal of July 1,1959 represents no change from last year.

The State has certified one herd of swine during calendar year 1957 using recommended procedures outlined by United States Livestock Sanitary Association. There is very little interest in the certification of swine herds at the present time.

NORTH CAROLINA

Activities	Calend	lar Year	Percent Change
	1956	1957	for 1957
D1 1 m 1			
Blood Tests	00.440	00 105	20.0
No. Herds Tested	39,418	28,167	-28.6
No. Reactor Herds	412	263	-36.2
Percent	1.1	0.9	(-0.2)
No. Cattle Tested	302,500	262,986	-13.1
No. Reactor Cattle	760	611	-19.7
Percent	0.3	0.2	(-0.1)
Reactors Slaughtered	695	611	-12.1
Percent	91.4	100.0	(+8.6)
Ring Tests			
No. Herds Tested	22,779	22,308	-2.1
No. Susp. Herds	247	222	-10.2
Percent	1.0	0.9	(-0.1)
Vaccinations	2,800	3,424	+22.2
Certifications			
New Counties	0	0	
Counties Removed	0	0	
Total Cert. Counties	100	100	

() % difference

As of July 1, 1942, North Carolina became the first State to achieve Statewide certification. Efforts are now being directed toward the goal of complete eradication through a sound program for reducing further the incidence of infection. Additional personnel provided during the year have materially aided in tracing sources of infection and in the control of reactors until slaughtered. There are no brucellosis committees as such, but representatives of the various organized segments of the industry lend valuable support. Testing for recertification is current and will be maintained. Judging from results attained during the past year and with continued support at the present rate, it is expected that herd infection will be reduced to 0.6 percent and the cattle infection to 0.09 percent by the end of calendar year 1958.

There are provisions in North Carolina for the certification of brucellosis-free swine herds. This program is being accepted by producers and the first 12 herds were certified during 1957. It is expected there will be a total of 36 such herds by December 31, 1958.

NORTH DAKOTA

Activities	Calend	dar Year	Percent Change	
	1956	1957	for 1957	
Blood Tests	20.000	01 400	10.5	
No. Herds Tested	20,906	21,428	+2.5	
No. Reactor Herds	2,843	2,466	-23.3	
Percent	13.6	11.5	(-2.1)	
No. Cattle Tested	469,979	468,711	-0.3	
No. Reactor Cattle	11,408	8,520	-25.4	
Percent	2.4	1.8	(-0.6)	
Reactors Slaughtered	11,071	8,417	-24.0	
Percent	97.0	98.8	(+1.8)	
Ring Tests				
No. Herds Tested	11,794	14,729	+24.8	
No. Susp. Herds	350	240	-31.5	
Percent	3.0	1.6	(-1.4)	
Vaccinations	85,087	114,573	+34.6	
Certifications				
New Counties	6	3		
Counties Removed	0	3		
Total Cert. Counties	33	33		

() % difference

The program in North Dakota continues to be handicapped by a serious shortage of veterinary personnel. The few practitioners located in the State do not participate to the extent necessary to advance the program at a satisfactory rate. A solution to this problem appears to be wider use of qualified technicians, as it seems impossible to obtain adequate veterinary participation.

Increased emphasis is being placed on the vaccination program. It is hoped that more extensive vaccination will materially aid in protecting the gains already made and provide increased numbers of resistant cattle in those areas not yet certified.

Although adequate legislation is available for conducting complete area work, a goal for State-wide certification has not been established.

As of December 31, 1957, 33 of the 53 counties were certified. It is expected that this number will be increased to 37 by December 31, 1958; with an additional 8 counties conducting complete area work.

North Dakota provides for the certification of brucellosis-free swine herds. However, only one such herd was certified as of December 13, 1957.

Activities	Calend 1956	lar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	30,182	37,234	+23.4
No. Reactor Herds	2,873	3,408	+18.6
Percent	9.5	9.2	(-0.3)
No. Cattle Tested	263,192	331,984	+26.1
No. Reactor Cattle	6,648	8,244	+24.0
Percent	2.5	2.5	(0.0)
Reactors Slaughtered	2,414	5,072	110.1
Percent	36.3	61.5	(+25.2)
Ring Tests			
No. Herds Tested	75,338	68,456	-9.2
No. Susp. Herds	6,591	5,870	-11.0
Percent	8.7	8.5	(-0,2)
Vaccinations	59,480	67,329	+13.1
Certifications	ŕ	ŕ	
New Counties	0	5	
Counties Removed	0	0	
Total Cert. Counties	0	5	

New State legislation governing the control and eradication of bovine brucellosis in Ohio became effective on June 24, 1957. Funds are adequate to carry out the program and, for the most part, legislative authority for conducting effective brucellosis eradication work is available. The goal for state-wide certification is still June 1960. It is believed, however, that this status may be achieved earlier. Five counties were certified during 1957. Twenty-seven additional counties are expected to be certified in 1958. Eighty-seven of the 88 counties in Ohio will be either certified or under a complete area program by the end of 1958.

The Extension Service, breed organizations, artificial breeding associations, and other interested groups have been active and effective in promoting the brucellosis program. State and Federal disease eradication offices are represented on the health committees of all livestock organizations in Ohio.

Provisions are available in Ohio for the establishment and maintenance of brucellosis-free swine herds. Currently there are 17 such herds in the State and this number is expected to increase to 25 during 1958. The State Fair as well as many local fairs now require that swine must have passed a blood test for brucellosis prior to exhibition. This action has been helpful in promoting swine brucellosis work.

Activities	Calend 1956	lar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	12,204	14,020	+14.9
No. Reactor Herds	2,812	2,912	+3.6
Percent	23.0	20.8	(-2.2)
No. Cattle Tested	160,121	224,595	+40.3
No. Reactor Cattle	6,485	7,335	+13.1
Percent	4.1	3.3	(-0.8)
Réactors Slaughtered	5,516	6,336	+14.9
Percent	85.1	86.4	+1.3
Ring Tests			
No. Herds Tested	24,101	31,682	+31.4
No. Susp. Herds	5,406	4,109	-24.0
Percent	22.4	12.9	(-9.5)
Vaccinations	95,789	129,728	+35.4
Certifications			
New Counties	0	0	
Counties Removed	0	0	
Total Cert. Counties	0	0	

The brucellosis eradication program in Oklahoma has shown some improvement over previous years. It is handicapped, however, by complacency and indifference on the part of individuals and organizations that should be vitally interested. Other retarding factors have been outbreaks of anthrax and vesicular stomatitis during the year.

Local brucellosis committees were largely responsible for the four counties adopting area work, and they are assisting in promoting adoption of area work in a number of other counties. Increased efforts directed toward an effective educational program are needed.

The goals for calendar year 1958 are: (a) four counties to be initially certified and (b) area work will be in progress in 14 other counties.

The Statewide certification goal is 1961, which represents a change from the 1962 date originally established.

There are no provisions for the establishment and maintenance of brucellosisfree swine herds in Oklahoma.

OREGON

Activities	Calend	lar Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	28,950	27,788	-4.1
No. Reactor Herds	827	1,088	+31.6
Percent	2.9	3.9	(+1.0)
No. Cattle Tested	335,249	348,639	+3.9
No. Reactor Cattle	2,763	2,690	-2.7
Percent	0.8	0.8	(0.0)
Reactors Slaughtered	2,697	3,079	+14.2
Percent	97.6	114.5	(+16.9)
Ring Tests			
No. Herds Tested		8,454	
No. Susp. Herds		453	
Percent		5.3	
Vaccinations	80,267	137,801	+71.6
Certifications			
New Counties	1	4	
Counties Removed	0	0	
Total Cert. Counties	10	14	

() % difference

Effective July 1, 1957, a State brucellosis law was adopted whereby the Oregon State Department of Agriculture was delegated the authority to promulgate regulations for brucellosis eradication. This removed the primary weakness of Oregon's program. Heretofore it has been vested in county authority. This action automatically established the entire State as a compulsory test area. Area work is in progress in all but two counties. A small group of cattlemen from eastern Oregon has contested the legislative action by bringing suit on the grounds that it is unconstitutional. The suit has not been settled as yet.

Work has continued at a very satisfactory rate and fourteen of the thirty-six counties in the State were certified as of January 1, 1958.

The previous goal of June 30, 1958 for complete certification has been changed to July 1, 1959.

Oregon does not have a swine brucellosis program.

PENNSYLVANIA

Activities	Calend 1956	lar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	59,029	59,098	+0.1
No. Reactor Herds	5,547	3,593	-35.3
Percent	9.4	6.1	(-3.3)
No. Cattle Tested	885,738	873,799	-1.4
No. Reactor Cattle	9,631	5,847	-39.3
Percent	1.1	0.7	(-0.4)
Reactors Slaughtered	10,237	5,759	-43.8
Percent	106.3	98.5	(-7.8)
Ring Tests			
No. Herds Tested	62,650	60,449	-3.6
No. Susp. Herds	1,297	449	-65.4
Percent	2.0	0.7	(-1.3)
Vaccinations	127,632	143,980	+12.8
Certifications			
New Counties	20	10	
Counties Removed	0	1	
Total Cert. Counties	49	58	

() % difference

Brucellosis eradication continues to progress in Pennsylvania at a satisfactory rate. The chief factor retarding the project during 1957 was failure of practitioners to participate fully. Both State and Federal veterinarians were used as widely as possible to help meet testing schedules.

As usual, State and County brucellosis committees have been very active and are largely responsible for the good support given the program by the livestock industry in Pennsylvania.

The goal for State-wide certification is still July 1, 1958. While this may not be possible, there is every reason to believe all counties in the State will be qualified sometime during this calendar year. It is anticipated that infection rates will be reduced to 1.5 percent herd and 0.3 percent cattle by December 31, 1958.

Pennsylvania does not have either a swine brucellosis eradication program or provisions for certifying brucellosis-free swine herds. Blood samples are being collected from swine at State inspected abattoirs and tested to determine the extent of infection. Once this has been established, funds will be requested by the State to inaugurate a swine brucellosis project.

RHODE ISLAND

Activities	Calenda	r Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	612	1,634	+167.0
No. Reactor Herds	86	230	+167.4
Percent	14.1	14.1	(0.0)
No. Cattle Tested	13,671	30,559	+123.5
No. Reactor Cattle	193	464	+140.4
Percent	1.4	1.5	(+0.1)
Reactors Slaughtered	225	540	+140.0
Percent	116.6	116.4	(-0.2)
Ring Tests			
No. Herds Tested	716	289	-71.6
No. Susp. Herds	238	64	-71.4
Percent	33.2	22.1	(-11.1)
Vaccinations	2,409	2,067	-14.2
Certifications			
New Counties	0	0	~ ~ ~
Counties Removed	0	0	
Total Cert. Counties	0	0	

() % difference

Adequate legislation is available in Rhode Island to conduct brucellosis eradication activities on a complete area basis and has resulted in such a program being in operation in all counties at the present time.

Although more extensive use of the BRT would benefit the program, it is expected that all counties in the State will qualify for certification by December 31, 1958. This reflects a change from the previously set goal of April 1958.

There are no State provisions for certifying brucellosis free swine herds.

SOUTH CAROLINA

Calend	ar Year	Percent Change
1956	1957	for 1957
16,840	12,200	-27.6
484	454	-6.2
2.9	3.7	(+0.8)
167,137	160,715	-3.9
1,099	1,069	-2.8
0.7	0.7	(0.0)
831	929	+11.8
75.6	86.9	(+11.3)
6,121	5,457	-10.9
851	231	-72.9
13.9	4.2	(-9.7)
14,487	16,041	+10.7
6	5	
8	0	
7	12	
	1956 16,840 484 2.9 167,137 1,099 0.7 831 75.6 6,121 851 13.9 14,487	16,840 12,200 484 454 2.9 3.7 167,137 160,715 1,099 1,069 0.7 0.7 831 929 75.6 86.9 6,121 5,457 851 231 13.9 4.2 14,487 16,041

() % difference

The South Carolina brucellosis eradication project is making good progress with funds available for carrying out the work. Program deficiencies during 1957 included the tendency on the part of fee-testing veterinarians to test easily available herds rather than to give complete coverage of areas assigned. Other factors that retarded activities were the reluctance of some veterinarians to test until restraining chutes were provided and the interruption of fee-testing in June 1957 due to budgetary problems which developed near the close of the fiscal year.

There are only a few local brucellosis committees operating in South Carolina, but livestock committees of the Farm Bureau, the Grange, extension agents and vocational agricultural teachers have effectively supported the work.

Under current operating schedules fourteen counties should be initially certified during calendar year 1958, and all of the remaining forty-six will be doing complete area work at the close of the year. A total of twenty-six counties should be certified as of December 31, 1958.

The goal for Statewide certification has now been established as January 1, 1960 rather than December 1960 as previously reported.

There is ample authority for the certification of brucellosis-free swine herds. Because of the cost and difficulties of establishing and maintaining certified swine herds no program of this type is now in effect nor is one contemplated, during 1958.

SOUTH DAKOTA

Activities	Calendar Year		Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	11,107	15,360	+38.3
No. Reactor Herds	2,484	2,399	-3.5
Percent	22.4	15.6	(-6.8)
No. Cattle Tested	166,173	239,530	+44.1
No. Reactor Cattle	8,018	7,160	-10.8
Percent	4.8	3.0	(-1.8)
Reactors Slaughtered	4,538	5,877	+29.5
Percent	56.6	82.1	(+25.5)
Ring Tests			
No. Herds Tested	37,784	40,504	+7.1
No. Susp. Herds	5,040	4,444	-11.9
Percent	13.3	10.9	(-2.4)
Vaccinations	224,451	251,997	+12.3
Certifications			
New Counties	0	0	
Counties Removed	0	0	
Total Cert. Counties	0	0	

() % difference

Legislation enacted during 1957 provides authority to conduct complete area work in South Dakota. Supplementing this authority there was a substantial increase in State funds appropriated for brucellosis control and eradication activities. Other improvements in the program include enlargement of laboratory facilities, quarantine of infected herds and the use of properly trained and supervised technicians to supplement the professional force.

The most serious problem preventing faster expansion of the program in South Dakota is the acute shortage of veterinary personnel. Through increased use of qualified technicians this problem will be partially alleviated.

Local brucellosis committees were helpful in obtaining the necessary legislation that now permits complete area work.

It is estimated that by December 31, 1958, twelve counties will be certified and complete area work will be underway in an additional eight counties. A goal for State-wide certification has not yet been established.

There are no provisions in South Dakota for the establishment and maintenance of brucellosis-free swine herds.

Activities	Calend	ar Year	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	28,575	78,938	+176.2
No. Reactor Herds	4,007	6,697	+67.1
Percent	14.0	8.5	(-5.5)
No. Cattle Tested	362,212	698,745	+92.9
No. Reactor Cattle	8,576	12,709	+48.2
Percent	2.4	1.8	(-0.6)
Reactors Slaughtered	7,338	12,725	+73.4
Percent	85.6	100.1	(+14.5)
Ring Tests			
No. Herds Tested	58,685	62,062	+5.7
No. Susp. Herds	21,800	22,513	+3.2
Percent	37.1	36.2	(-0.9)
Vaccinations	109,886	161,998	+47.4
Certifications			
New Counties	2	19	
Counties Removed	0	0	
Total Cert. Counties	2	. 21	

The brucellosis eradication program in Tennessee has exceeded all expectations in the number of cattle blood tested and calves vaccinated. Lack of sufficient veterinary practitioners is a retarding factor to further expansion of area work.

The most significant improvement during the year was the employment of technicians by the State in area counties to tag, brand, appraise reactors and assist in lining up testing for veterinarians.

County Brucellosis Committees have played a major role in the advancement of the program. It was through these committees that action was initiated to request complete area testing.

The anticipated goals for the calendar year 1958 are: (a) 62 counties to be initially certified (b) complete area work will be in progress in 14 counties and (c) a total of 83 counties certified by December 31, 1958.

The Statewide certification goal is July 1, 1959, which is six months prior to the previous goal of 1960.

There are provisions in Tennessee for the certification of brucellosis-free swine herds. These are applicable, however, only to pure-bred herds.

Acceptance of this program by the pure-bred breeders has been excellent. There appears to be a very low incidence of Brucella infection in Tennessee swine.

Twenty-five new swine herds were certified during calendar year 1957. There were 34 certified brucellosis-free swine herds as of December 31, 1957. There will probably be a total of about 70 such herds as of December 31, 1958.

Activities	Calendar Year		Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	13,897	15,671	+12.8
No. Reactor Herds	1,417	1,775	+25.3
Percent	10.2	11.3	(+1.1)
No. Cattle Tested	86,490	138,758	+60.4
No. Reactor Cattle	3,288	5,383	+63.7
Percent	3.8	3.9	(+0.1)
Reactors Slaughtered	802	3,355	+318.3
Percent	24.4	62.3	(+37.9)
Ring Tests			
No. Herds Tested	7,222	19,548	+157.5
No. Susp. Herds	4,865	10,769	+121.3
Percent	67.3	55.0	(+12.3)
Vaccinations	98,408	152,475	+54. 9
Certifications			
New Counties	0	0	
Counties Removed	0	0	
Total Cert. Counties	0	0	
	ø		() # difference
	-		() % difference

Adequate State legislation for conducting brucellosis control and eradication on a complete area basis in Texas is not yet available. Dairymen, in particular, are becoming more interested in brucellosis and a BRT program is in operation. Calf vaccination in both dairy and beef herds has been stimulated also. The present brucellosis program is voluntary and an intensified educational campaign must precede any change to a plan supported by law or regulation. A pilot testing program was started in Hopkins County to determine the disease problem in this particular area and to assist in preparing the livestock industry for effective brucellosis program operations.

A goal of December 31, 1962 has been set for achieving Statewide certification. None of the 254 counties in Texas were certified as of December 1957, and it is not expected that any will be qualified by the end of calendar year 1958.

Progress of the brucellosis eradication program has been retarded by the absence of necessary legislation to carry out complete area work. Interest in brucellosis eradication is being stimulated by educational work and it is believed that an attempt will be made soon to propose necessary legislation to support testing on a complete area basis.

Provisions are not available in Texas for the establishment and maintenance of brucellosis-free swine herds.

Activities	Calendar Year 1956 1957		Percent Change for 1957
Blood Tests			
No. Herds Tested	5,944	15,412	+159.3
No. Reactor Herds	559	905	+61.9
Percent	9.4	5.9	(-3.5)
No. Cattle Tested	66,860	145,855	+118.1
No. Reactor Cattle	1,268	2,015	+58.9
Percent	1.9	1.4	(-0.5)
Reactors Slaughtered	1,115	1,732	+55.3
Percent	87.9	86.0	(-1.9)
Ring Tests			
No. Herds Tested	14,503	13,986	-3.6
No. Susp. Herds	536	387	-27.8
Percent	3.6	2.7	(-0.9)
Vaccinations	59,092	91,623	+55.0
<u>Certifications</u>			
New Counties	2	13	
Counties Removed	0	0	
Total Cert. Counties	2	15	

Utah can well be proud of the progress made in the brucellosis eradication effort during the past year.

The goal of complete certification by June 30, 1958 should be met as expected.

All segments of the livestock industry have supported the program. The State Brucellosis Committee recommended the adoption of a regulation which limited the grazing on public domain to cattle from modified certified brucellosis-free areas or cattle negative to the test for brucellosis. This proposed regulation was published, and when no objections were received it was adopted by the State Board of Agriculture, effective October 15, 1957. The local brucellosis committees have assisted in promoting local participation and assisting in all phases of the program. It is anticipated that Utah may be the first strictly range State to achieve complete certification.

There are no provisions for the establishment and maintenance of brucellosisfree swine herds in the State, but the swine industry has indicated an interest in the program. A state regulation requiring a negative brucellosis test for breeding swine exhibited at fairs and stock shows has been adopted.

Activities	Calend 1956	ar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	8,299	9,760	+17.6
No. Reactor Herds	1,954	1,955	0.0
Percent	23.5	20.0	(-3.5)
No. Cattle Tested	204,287	221,258	+8.3
No. Reactor Cattle	4,497	4,269	-5.1
Percent	2.2	1.9	(0.3)
Reactors Slaughtered	4,034	4,157	+3.0
Percent	89.7	97.4	(+7.7)
Ring Tests			
No. Herds Tested	29,425	18,670	-36.5
No. Susp. Herds	8,144	2,295	-71.9
Percent	27.6	12.2	(-15.4)
Vaccinations	54,720	54,424	-0.6
Certifications			
New Counties	0	14	
Counties Removed	0	0	
Total Cert. Counties	0	14	

Vermont was declared a Modified Certified Brucellosis-free State on August 12, 1957; it was the ninth State to reach this goal.

Legislation was effected in February 1957 which virtually made it mandatory for all herds of cattle in Vermont to conform to requirements of the vaccination-test plan. Previously many herds had practiced only vaccination or were not enrolled on any control plan. The above mentioned legislation enabled officials to determine the brucellosis status of all Vermont herds by either the BRT or blood tests.

In the final clean up toward a Modified Certified State, local teams organized by county extension agents and led by representative farmers, canvassed neighborhoods to seek out all small herds not covered by the BRT. These herds were then assigned to the local veterinarian to blood test or were tested by regular State or Federal employees.

Efforts are now being directed toward further reducing the incidence of brucellosis with eradication as a final goal. It is expected that by December 31, 1958 the infection rate will be reduced to 1.5 percent of the herds and 0.7 percent of the cattle. There are no provisions for the certification of brucellosis-free swine herds.

<u>Activities</u>	<u>Calend</u> 1956	dar Year 1957	Percent Change for 1957
Blood Tests			
No. Herds Tested	16,771	34,646	+106.6
No. Reactor Herds	1,610	1,715	+6.5
Percent	9.6	5.0	(-5.6)
No. Cattle Tested	300,549	402,413	+33.9
No. Reactor Cattle	2,743	3,170	+15.6
Percent	0.9	0.8	(-0.1)
Reactors Slaughtered	3,323	4,267	+28.4
Percent	121.1	134.6	(+13.5)
Ring Tests			
No. Herds Tested	19,676	12,678	-35.6
No. Susp. Herds	2,464	1,156	-53.1
Percent	5.8	9.1	(+3.3)
Vaccinations	76,660	79,094	+3.1
<u>Certifications</u>			
New Counties	0	10	
Counties Removed	0	0	
Total Cert. Counties	0	10	

The chief difficulty encountered in the Virginia brucellosis eradication campaign during 1957 was failure of fee-basis veterinarians to complete assignments promptly, thereby seriously interfering with plans to conduct a well-coordinated program. Work now assigned to practitioners must be completed within a specified time or it is reassigned.

Increased use of the brucellosis ring-test has materially helped in the certification of areas. Expansion of testing facilities also has contributed to more rapid progress along these lines.

The State brucellosis committee continues to support this program in an effective manner.

The goal for State-wide certification is December 1960. During 1958 it is expected that 55 counties will be certified and complete area work will be underway in 12 others. There should be a total of 65 certified counties in the State by December 31, 1958.

Virginia has provisions for certifying brucellosis-free swine herds. However, they are differentiated from certified cattle herds by designating them "classified".

At the present time, 11 herds are officially "classified" and 15 others are in the process of qualifying. It is expected that a total of 50 swine herds will be listed as "classified" by the end of calendar year 1958.

WASHINGTON

Activities	Calendar Year		Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	12,022	9,522	-20.8
No. Reactor Herds	694	571	-17.8
Percent	5.8	6.0	(+0,2)
No. Cattle Tested	206,724	177,613	-14.1
No. Reactor Cattle	1,837	1,349	-26.6
Percent	0.9	0.8	(-0.1)
Reactors Slaughtered	1,825	1,466	-19.7
Percent	99.3	108.7	(+9.4)
Ring Tests			
No. Herds Tested	16,691	18,753	+12.3
No. Susp. Herds	2,409	1,404	-41.8
Percent	14.4	7.4	(-7.0)
Vaccinations	87,233	109,476	+25.4
Certifications			
New Counties	10	0	
Counties Removed	0	0	
Total Cert. Counties	39	39	

() % difference

Washington became certified on June 1, 1956, and since that time special attention has been directed toward reducing the number of quarantined herds in the state by prompt retests. There are less than 150 such herds listed at present. Washington is concentrating activities toward complete eradication of brucellosis.

A State regulation requiring the identification of animals at all sales yards to assist in tracing infection back to herds of origin was inaugurated during the year. Slaughterhouse blood samples of all breeding animals three years of age or older are collected at State and Federal inspected establishments. This has proved to be a very effective tool in locating infected herds and screening non-infected herds.

Very few swine are raised in the State and there has been no interest in a swine brucellosis program.

WEST VIRGINIA

Activities	Calend	ar Year_	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	13,205	16,624	+25.9
No. Reactor Herds	473	517	+9.3
Percent	3.6	3.1	(-0.5)
No. Cattle Tested	164,547	195,579	+18.9
No. Reactor Cattle	1,075	1,234	+14.8
Percent	0.6	0.6	(0.0)
Reactors Slaughtered	1,039	1,128	+8.6
Percent	96.7	91.4	(-5.3)
Ring Tests			
No. Herds Tested	9,326	1.008	-89.2
No. Susp. Herds	371	8	-97.9
Percent	3.9	0.7	(-3.2)
Vaccinations	10,984	11,472	+4.4
Certifications			
New Counties	6	9	
Counties Removed	. 4	0	
Total Cert. Counties	16	25	

() % difference

The main retarding influence in the West Virginia brucellosis eradication campaign during the past year was an acute shortage of operating personnel. This has been corrected to some extent through the employment of qualified technicians and the detail of Animal Disease Eradication Division personnel from other States to assist in difficult areas of West Virginia.

Although the State brucellosis committee supports the program, it has not been as active as possible during the past year.

The previous goal of September, 1958 set for State-wide certification has been changed to September, 1959.

It is expected that 13 counties can be certified during calendar year 1958. In addition, 16 others should be under a complete area program. If work progresses as anticipated there will be a total of 38 counties certified as of December 31, 1958.

Provisions for the certification of brucellosis-free swine herds are available in West Virginia. With a small, unorganized swine industry in the State there has been very little interest in such a program and no herds are currently certified.

WISCONSIN

Activities	Calend	lar Year_	Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	54,874	28,305	-48.5
No. Reactor Herds	13,306	5,427	-59.3
Percent	24.2	19.2	(-5.0)
No. Cattle Tested	1,142,141	604,010	-47.2
No. Reactor Cattle	25,269	10,137	-59.9
Percent	2.2	1.7	(-0.5)
Reactors Slaughtered	26,879	11,082	-58.8
Percent	106.4	109.3	(+2.9)
Ring Tests			
No. Herds Tested	236,052	219,473	-7.1
No. Susp. Herds	24,293	11,101	-54.4
Percent	10.2	5.0	(-5.2)
Vaccinations	490,644	503,922	+2.7
Certifications			
New Counties	35	0	
Counties Removed	0	0	
Total Cert. Counties	71	71	

() % difference

Since qualifying for State-wide certification on June 6, 1956, Wisconsin has continued an intensified program directed toward the eventual eradication of brucellosis. Improvements were made during 1957 in laws relating to bovine brucellosis. These require owners to present animals for test, examinations, and identification; makes it necessary for blood tests to be conducted within 15 days of date owner receives notice of suspicious ring test, and requires compulsory vaccination for 12 months following disclosure of reactors.

It is anticipated that by December 31, 1958, the herd infection rate will be reduced to 1.8 percent and cattle infection to 0.16 percent.

Field and laboratory studies will be continued during 1958 on methods for improving currently used procedures so that final eradication can be attained as quickly as possible.

Provisions are available in Wisconsin for the certification of brucellosis-free swine herds. As of December 31, 1957, there were 7 certified herds in the State.

Activities	Calendar Year		Percent Change
	1956	1957	for 1957
Blood Tests			
No. Herds Tested	3,025	3,753	+24.1
No. Reactor Herds	312	467	+49.7
Percent	10.3	12.4	(+2.1)
No. Cattle Tested	61,674	103,021	+67.0
No. Reactor Cattle	935	1,403	+50.1
Percent	1.5	1.4	(-0.1)
Reactors Slaughtered	858	1,084	+26.3
Percent	91.8	77.3	(-14.5)
Ring Tests			
No. Herds Tested	5,326	5,342	+0.3
No. Susp. Herds	248	194	-21.8
Percent	4.7	3.6	(-1.1)
Vaccinations	138,997	188,075	+35.3
Certifications			
New Counties	0	0	
Counties Removed	0	0	
Total Cert. Counties	0	0	

Both County and State brucellosis committees in Wyoming have been reorganized during the year. The State committee was instrumental in obtaining a change in petition requirements for area testing from 75 percent of the cattle owners owing 95 percent of the cattle to a minimum of 51 percent of the owners owning not less than 75 percent of the cattle. This has made it possible for area work to be under way in 10 counties at the close of 1957.

It is anticipated that 10 counties will be certified during this current year with area work being in progress in 8 additional counties.

The goal for Statewide certification remains December 31, 1960.

There are no provisions for certification of brucellosis-free swine herds in the State.

PUERTO RICO

Activities	Calend	lar Year 1957	Percent Change for 1957
	2000		
Blood Tests			
No. Herds Tested	23,065	13,372	-42.1
No. Reactor Herds	828	1,015	+22.6
Percent	3.6	7.6	(+4.0)
No. Cattle Tested	222,363	246,458	+10.8
No. Reactor Cattle	2,241	2,488	+11.0
Percent	1.0	1.0	(0.0)
Reactors Slaughtered	1,561	2,304	+47.6
Percent	69.7	92.6	(+22.9)
Ring Tests			
No. Herds Tested	601	1,007	+67.5
No. Susp. Herds	145	166	+14.4
Percent	24.1	16.4	(-7.7)
Vaccinations	12,276	15,819	+28.8
Certifications			
New Counties	18	31	
Counties Removed	11	1	
Total Cert. Counties	47	77	

() % difference

Puerto Rico was declared a Modified Certified Brucellosis-free Commonwealth on November 25, 1957. As evidenced by this accomplishment, an effective program of brucellosis eradication was conducted during the calendar year. Work during the early part of the year was retarded by a lack of regulations requiring quarantine of all cattle in infected herds and disposal by slaughter of all reactors. Such regulations are now in operation and their enforcement has corrected these deficiencies.

The local brucellosis committee has been active and helpful in various phases of program activities.

All seventy-seven counties will retain their certified status during calendar year 1958. If current operating levels are maintained, it is expected that herd infection will be reduced to 2 percent and animal infection to 0.3 percent by December 31, 1958.

The delay in attaining certification was due, in par, to the extreme drought and the time required to put into operation the regulations requiring owners to slaughter reactors in Plan B herds (designated as Plan C herds in Puerto Rico). In order to complete the work which resulted in certification it was necessary to use technicians in areas where fee-testing veterinarians failed to render adequate service.

There are no provisions at this time for the certification of brucellosis-free swine herds, as limited testing has disclosed no reactors on the Island. Stringent regulations are being enforced to prevent the disease gaining entrance through swine brought into Puerto Rico.

HAWAII

The Territory of Hawaii embarked on a Cooperative Territory-Federal Brucellosis Eradication Program during the past year. A Memorandum of Understanding allowing for a complete brucellosis program was negotiated and became effective on July 1, 1957.

Although testing has been limited the number of dairy herds electing to adopt Plan A is very encouraging. Official calfhood vaccination has been possible by regulation prior to adoption of the eradication program.

A swine brucellosis program has not as yet been adopted.







